doi:10.20896/ah3kz944

PERSPECTIVE OPEN ACCESS

# When Conservation Displaces Communities: A Capability and Social Work Analysis of Tribal Well-Being in Nagarjunsagar Tiger Reserve

Keshav Walke[†*] and Venkat Rao Pulla[¥]

**Abstract**

Conservation-induced displacement presents a fundamental contradiction in contemporary environmental governance: efforts to protect ecosystems frequently compromise the well-being and rights of the very communities who have historically sustained those landscapes. This study examines this tension through an analysis of tribal communities displaced from the Srisailam Tiger Reserve in India. Using the WHO Quality of Life (WHOQOL) framework and Sen's capability approach, the research employs a mixed-method design to assess physical, psychological, social, and environmental well-being among displaced and non-displaced populations, enabling a multidimensional evaluation of how conservation reshapes everyday life.

Findings demonstrate that displacement is associated with consistently lower quality-of-life outcomes across all domains, with the most severe deficits observed in social and environmental well-being. Displaced households experience weakened social networks, reduced access to culturally significant environments, and diminished livelihood stability. Although differences in physical and psychological well-being are less pronounced, displaced groups remain disproportionately concentrated in lower well-being categories. These patterns indicate that displacement constrains core capabilities, including the ability to maintain secure livelihoods, sustain cultural practices, and exercise meaningful agency in shaping one's environment.

The study argues that these outcomes are not incidental but reflect structural inequalities embedded in conservation governance. Policies that prioritise ecological protection while neglecting the multidimensional nature of community well-being reproduce socio-economic marginalisation and cultural disruption. Governance frameworks often exclude local knowledge, restrict participation, and provide inadequate post-resettlement infrastructure, creating a persistent misalignment between conservation objectives and the lived realities of affected communities.

In response, the study advances the need for participatory, rights-based, and capability-enhancing conservation models that recognise Indigenous and local communities as partners rather than obstacles. By situating empirical findings within broader debates on ecological justice, the research contributes to interdisciplinary discussions on conservation, development, and Indigenous well-being. Drawing on green social work and human rights-based practice, the study underscores the critical role of social workers as mediators between ecological imperatives and community rights. Positioned as advocates for social justice and ecological integrity, social workers are essential to reshaping conservation governance toward approaches that are culturally responsive, participatory, and grounded in enhancing human capabilities.

**Keywords:** Conservation-Induced Displacement; Quality of Life; Tribal Communities; Srisailam Tiger Reserve; Ecological Justice; Sustainable Cultural Practices; Social Work Activism; Participatory Conservation; India

[†]Professor and Head, Department of Social Work, Matru Sewa Sangh Institute of Social Work, Nagpur, India and Director, Vajaha (Vana Jana Hakka) Foundation, Nagpur, India
*Corresponding Author Email: keshavwalke1@gmail.com
[¥]Fellow, FAASW, Accredtied Member, AASW, Foundation Professor of Strengths-Based- Social Work Practice, Australia
©2026 by Walke & Pulla is licensed under CC BY 4.0. To view a copy of this license, visit https://creativecommons.org/licenses/by/4.0/.

## Introduction

Protected areas have become critical instruments for biodiversity conservation in India, reflecting the country's commitment to safeguarding ecological wealth. India's extensive network of national parks, wildlife sanctuaries, and tiger reserves aims to reconcile conservation objectives with human development needs (Kothari, 2013). The Srisailam Tiger Reserve, spanning Andhra Pradesh and Telangana, is particularly significant for its rich biodiversity, including endangered species such as the Bengal tiger, and its role in maintaining ecological stability across the Deccan plateau (Reddy, 2017).

Despite these ecological gains, conservation initiatives have generated substantial socio-economic challenges. Indigenous tribal communities, historically inhabiting these forests, face restrictions on traditional livelihood practices, including shifting cultivation, grazing, and the collection of forest produce, often resulting in forced or voluntary displacement (Lasgorceix & Kothari, 2009). Displacement disrupts cultural identity, weakens social cohesion, and creates long-term challenges in livelihood security, access to natural resources, and environmental adaptation (Rao, 2016).

This study assesses the quality of life of displaced tribal communities in and around the Srisailam Tiger Reserve, analysing well-being across physical, psychological, social, and environmental domains. By adopting a multidimensional approach, the research highlights the complex interplay between conservation policies and human rights. Focusing on post-displacement impacts, the study aims to inform inclusive and sustainable conservation strategies that balance ecological preservation with the socio-economic and cultural needs of marginalised populations. Critically, the current study recognises the role of social work as both an analytical lens and a practice response to conservation-induced harm. The 2018 International Federation of Social Workers' (IFSW) global definition situates social work at the intersection of social justice, human rights, and community empowerment. This study argues that social work's person-in-environment perspective is uniquely suited to bridging ecological and human wellbeing agendas. Social work practitioners working with displaced tribal communities are called upon not merely to provide services, but to challenge the structural conditions, including unjust conservation regimes, that create vulnerability in the first place (Dominelli, 2012; Gray et al., 2013; Pulla, 2014).

## Literature Review

### Conservation-Induced Displacement and Environmental Governance

The expansion of protected areas has been a central strategy in global biodiversity conservation, yet it has generated high social costs, particularly for Indigenous and forest-dependent populations. Conservation-induced displacement (CID) refers to the physical relocation or restriction of access to natural resources resulting from conservation policies. Estimates suggest that millions of people worldwide have been affected by such processes, often without adequate compensation or rehabilitation (Brockington & Igoe, 2006).

In India, legislative frameworks such as the Wildlife Protection Act, 1972[1] and the Forest Conservation Act, 1980[2] facilitated the creation of protected areas, frequently overlapping with customary tribal lands (Kothari et al., 1995). While these policies have contributed to biodiversity preservation, they have also institutionalised forms of exclusion that disrupt

[1] It is a landmark Indian law that safeguards wildlife, including animals, birds, and plants, while maintaining ecological balance, curbing illegal hunting, and overseeing the management of protected habitats.

[2]The Forest (Conservation) Act, 1980 is another landmark Indian legislation designed to curb deforestation. It places authority over forest lands under the central government and mandates that no forest area may be diverted to non-forest uses without prior approval from federal authorities

traditional livelihoods and socio-cultural systems. Scholars in political ecology argue that such "fortress conservation" models prioritise ecological protection through spatial exclusion, often marginalising local communities (Cernea & Schmidt-Soltau, 2006).

**Displacement, Marginalisation, and Structural Inequality**

Displacement is not merely a physical relocation but a process that generates multidimensional impoverishment. Cernea's (2000) Impoverishment Risks and Reconstruction (IRR) model identifies key risks associated with displacement, including landlessness, joblessness, social disarticulation, and food insecurity. Empirical studies in India demonstrate that tribal populations are disproportionately affected, with rehabilitation programs frequently failing to restore pre-displacement living standards (Fernandes, 2008).

Research across protected areas such as Kanha, Nagarhole, and Sariska highlights recurring patterns of inadequate resettlement, loss of access to forest-based livelihoods, and erosion of cultural identity (Rangarajan & Shahabuddin, 2006; Lasgorceix & Kothari, 2009). These outcomes reflect broader structural inequalities, where conservation priorities are implemented without sufficient attention to social justice or indigenous rights. In the context of the Srisailam Tiger Reserve, previous studies have documented long-term challenges related to livelihood adaptation, psychological stress, and social fragmentation (Rao et al., 2011).

**Conceptualising Quality of Life: WHOQOL and Capability Approach**

Quality of Life (QoL) has emerged as a central concept in development and social policy, emphasising multidimensional well-being beyond income-based measures. The World Health Organization (WHO, 1997) conceptualises QoL across four domains: physical health, psychological well-being, social relationships, and environmental conditions. This framework is particularly useful in displacement contexts, where impacts are distributed across multiple life dimensions.

Complementing this, Sen's (1999) capability approach provides a normative framework that shifts focus from resources to the substantive freedoms individuals possess to achieve valued ways of living. Capabilities such as access to health, education, social participation, and cultural expression are critical in assessing well-being. In displacement contexts, the loss of land, community, and environmental familiarity can be understood as a contraction of these capabilities, limiting both agency and life choices.

**Multidimensional Impacts of Displacement on Well-Being**

A growing body of literature highlights the interconnected nature of well-being outcomes following displacement. Physical health is often compromised due to reduced access to nutrition, healthcare, and clean water (Cernea & Schmidt-Soltau, 2006). Psychological well-being is affected by stress, trauma, and the loss of cultural identity. Social cohesion weakens as kinship networks and traditional institutions are disrupted, while environmental well-being declines with restricted access to natural resources that underpin livelihoods and cultural practices.

These domains are not independent; rather, they interact in reinforcing ways. For example, environmental degradation can undermine livelihoods, leading to economic stress and psychological distress. Such interdependencies underscore the importance of adopting integrated frameworks, such as WHOQOL and the capability approach, to capture the full extent of displacement impacts.

**Social Work, Human Wellbeing, and Conservation Justice**

Social work's engagement with environmental and conservation issues has deepened considerably over the past two decades, culminating in the emergence of green social work as a distinct theoretical and practice framework. Dominelli (2012) defines green social work as an approach that integrates the

promotion of socially just, ecologically sustainable environments with the practice of social work as a profession committed to enhancing human wellbeing. Green social work directly challenges the dichotomy between human welfare and environmental protection, arguing that authentic social justice demands attention to the ecological conditions in which human life is embedded.

In the context of indigenous displacement, the social work profession is uniquely positioned to foreground the relational, cultural, and structural dimensions of wellbeing that purely technical or economic approaches overlook. The IFSW Global Social Work Statement of Ethical Principles (2018) explicitly recognises indigenous peoples' rights to self-determination, land, culture, and identity — principles that are fundamentally at stake in conservation-induced displacement. Social workers operating in these contexts are therefore obligated to engage in advocacy, community development, and structural critique alongside direct service provision (Gray et al., 2013).

The person-in-environment (PIE) perspective, foundational to social work practice, offers a particularly resonant lens for understanding conservation displacement. PIE situates individual wellbeing within the broader social, cultural, and environmental systems that shape it (Germain & Gitterman, 1980). When conservation policies sever the relationship between tribal communities and their ecological environments, they disrupt the very relational systems that social work has long identified as central to human flourishing. This study adopts the social work PIE framework as an interpretive tool for understanding not merely what quality-of-life scores indicate, but what they mean for the relational and structural conditions of tribal life.

Internationally, studies have begun documenting social work's role in mediating between conservation authorities and indigenous communities. Ife (2012) argues that human rights-based social work practice requires practitioners to challenge systems that violate communities' rights to their land, culture, and way of life, a mandate directly applicable in conservation displacement contexts. This literature underscores the significant gap that exists when social work is absent from conservation governance: displaced communities lack advocates who can translate their lived experiences into policy-relevant evidence and ensure that resettlement processes are grounded in principles of dignity, equity, and self-determination.

**Research Gaps and Contribution of the Study**

Despite extensive documentation of displacement impacts, several gaps remain. First, many studies focus primarily on economic or livelihood outcomes, neglecting psychological, social, and environmental dimensions of well-being (Walke, 2021). Second, there is limited application of integrated theoretical frameworks that combine multidimensional QoL assessment with normative perspectives such as the capability approach. Third, empirical studies in the Srisailam Tiger Reserve remain relatively sparse, particularly those that compare displaced and non-displaced populations within a single analytical framework.

This study addresses these gaps by:

- Employing a multidimensional QoL framework grounded in WHOQOL
- Interpreting findings through the lens of capability deprivation
- Providing a comparative analysis of displaced and non-displaced communities

In doing so, the study contributes to broader debates on conservation, development, and ecological justice by foregrounding the lived experiences and well-being of marginalised populations.

**Methodology**

This study adopts a mixed-method research design to examine the effects of conservation-induced displacement on tribal communities in the Srisailam Tiger Reserve, Andhra Pradesh (Figure 1). The design integrates quantitative and qualitative approaches to capture both measurable patterns of well-being and the lived experiences underlying them.




**Figure 1: Map of Nagarjun Sagar-Srisailam Tiger Reserve**
**Source: Image ID- KJCGMD, https://www.alamy.com/stock-image-nagarjunsagar-srisailam-tiger-reserve-map-166233661.html**

### Sampling and Data Collection

A total of 968 respondents were surveyed across 19 villages within and around the reserve. The sample includes:

- 426 individuals from displaced households relocated from core forest areas
- 542 individuals from non-displaced households residing in traditional settlements

A stratified sampling approach was used to ensure representation across displaced and non-displaced populations. Households were selected based on settlement status, livelihood type, and accessibility.

Primary data were collected through structured household surveys, semi-structured interviews and focus group discussions. Telugu-speaking field investigators from Kurunool district of Andhra Pradesh were appointed and oriented on the data collection tool before being sent into the field. They collected responses in Telugu from the heads of the families. The collected data were then translated into English. Figure 2 illustrates glimpses of a few data collection images from the field. The survey instrument was adapted from the WHOQOL framework, covering four domains: physical health, psychological well-being, social relationships, and environmental conditions. Responses were recorded using categorical self-assessment scales (Very Poor to Very Good).




Figure 2: Some Images While Collecting Data from the Villages under NSTR

**Analytical Framework**

The analysis is guided by the WHOQOL multidimensional well-being model and Sen's capability approach, which emphasises the ability of individuals to achieve valued functionings, and Dominelli's (2012) green social work framework, which foregrounds the interdependence of human and ecological wellbeing. Green social work provides a normative and practice-oriented complement to the WHOQOL and capability approaches by explicitly addressing how structural inequalities — including those produced by environmental and conservation policies — shape wellbeing outcomes for marginalised communities. Within this tripartite framework, the social, psychological, physical, and environmental domains of quality of life are understood not merely as measurable outcomes but as sites of social work intervention, advocacy, and community development.

Quantitative data were analysed using comparative percentage distributions across groups, supplemented by cross-domain interpretation. Qualitative data from interviews and discussions were thematically analysed to contextualise patterns observed in survey results.

**Limitations**

Often, reliance on self-reported data may introduce perception and recall bias. The cross-sectional design also has some limitations around causal inference. In the field, the forest department restricted visits to certain settlements, preventing data collection there. This limited access may compromise the representativeness of the study. Despite these constraints, triangulation of methods has enabled the reliability and interpretive depth of the findings.

**Findings**

The comparative analysis of the physical domain reveals a consistent, though moderate, disadvantage among displaced populations. Displaced respondents report slightly higher proportions in the "Very Poor" (14.95%) and "Poor" (17.12%) categories compared to non-displaced respondents (13.15% and 16.43%, respectively). While the numerical differences are not large, their persistence across categories suggests a systematic pattern rather than random variation.

More notably, non-displaced populations demonstrate a marginally stronger concentration in the "Moderate" and "Good" categories, indicating relatively greater stability in physical well-being. This may be attributed to continued access to familiar environmental

resources, traditional food systems, and established healthcare practices. In contrast, displaced households frequently reported challenges related to inadequate infrastructure, limited access to clean water, and increased dependence on external medical services.

From a capability perspective, these findings reflect constraints on basic functionings such as maintaining health, mobility, and nutritional adequacy. Displacement appears to weaken these capabilities not only through material deprivation but also through the disruption of ecological knowledge systems that support health and well-being.

Although both groups exhibit resilience—as reflected in similar proportions in the “Very Good” category—the overall distribution indicates that displaced populations face structural barriers that limit their ability to achieve higher levels of physical well-being.

The analysis compares the distribution of quality-of-life (QoL) categories across displaced (n=426) and non-displaced (n=542) populations. QoL is measured across four domains—physical, psychological, social, and environmental—using ordinal categories ranging from “Very Poor” to “Very Good.”

While the study primarily employs descriptive statistics (percentage distributions), comparative patterns are interpreted as indicative of systematic differences between groups. Observed variations are evaluated in terms of directional consistency, magnitude, and cross-domain convergence.

**Physical Domain**

The distribution of responses in the physical domain indicates a modest but consistent disadvantage among displaced populations. The proportion of respondents reporting “Very Poor” and “Poor” physical well-being is slightly higher among displaced individuals (32.07%) compared to non-displaced individuals (29.58%). Conversely, non-displaced respondents show a marginally higher concentration in the “Moderate” and “Good” categories.

Although the differences across categories are relatively small (generally within 1–2 percentage points), the directional consistency across lower and middle categories suggests a systematic pattern rather than random variation. Notably, both groups report similar proportions in the “Very Good” category (approximately 28%), indicating some degree of resilience across populations.

Overall, the physical domain reflects low-to-moderate disparity, with displacement associated with a slight shift toward lower well-being categories.

From a capability standpoint, these findings reflect limitations on fundamental functions such as health maintenance, mobility, and nutritional sufficiency. Displacement appears to damage these qualities not only through material deprivation, but also by disrupting ecological knowledge systems that promote health and well-being.

Although both groups demonstrate resilience—as evidenced by identical numbers in the "Very Good" category—the overall distribution suggests that displaced populations suffer structural impediments to achieving greater levels of physical well-being.

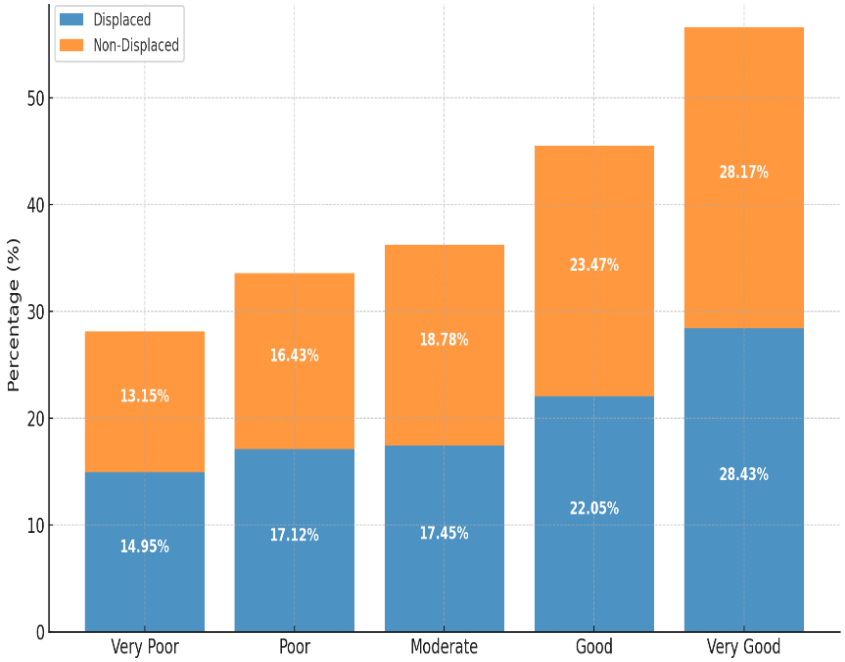



**Figure 3: Stacked Comparison of Quality of Life: Physical Domain**
**Source: Data Collected from the Field in December 2021**

***Psychological Domain***

In the psychological domain, the combined proportion of respondents in the "Very Poor" and "Poor" categories is slightly higher among displaced respondents (27.23%) than among non-displaced respondents (25.50%), a difference of 1.73 percentage points. This indicates a modest disadvantage in the lower well-being categories among displaced respondents; the difference should not be interpreted as evidence of a large disparity.

The "Very Good" category also shows a difference: 24.50% of non-displaced respondents fall in this category, compared with 21.13% of displaced respondents, a gap of 3.37 percentage points. The chart therefore indicates a modestly higher representation of non-displaced respondents at the highest level of reported psychological well-being.

The "Moderate" category accounts for the largest proportion of displaced respondents (28.17%), compared with 26.00% of non-displaced respondents (Figure 4). This shows a greater concentration of displaced respondents at the moderate level. As the data are cross-sectional, this distribution should not be described as evidence of limited upward mobility over time.

***Social and Environmental Domain***

The social and environmental domain shows clearer differences between the two groups than those observed in the physical and psychological domains. The proportion reporting "Poor" quality of life is 21.1% among displaced respondents and 15.0% among non-displaced respondents, a difference of 6.1 percentage points. The "Very Poor" proportions are also slightly higher among displaced respondents (10.8%) than among non-displaced respondents (9.5%). Together, these figures indicate a greater concentration of displaced respondents in the two lower categories.

Differences are also evident in the higher categories. In the "Good" category, the proportion is 32.5% among non-displaced respondents and 30.5% among displaced respondents, a difference of 2.0 percentage points. In the "Very Good" category, the corresponding proportions are 18.0% and 11.7%, respectively, a difference of 6.3 percentage points. These comparisons suggest a relative advantage for non-displaced respondents in reported social and environmental well-being.

The descriptive data establish an association between displacement status and the response distribution; they do not, by themselves, establish a causal effect.

The relative similarity in the "Moderate" category (approximately 25% for both groups) suggests that structural constraints affect all residents; however, displaced populations are disproportionately represented at both lower and upper extremes, indicating uneven adaptation.

**Overall Quality of Life**

A cross-domain review of Figures 3–5 shows that displaced respondents have higher combined proportions in the "Very Poor" and "Poor" categories in each domain: physical well-being (32.07% versus 29.58%), psychological well-being (27.23% versus 25.50%), and social and environmental well-being (31.9% versus 24.5%). The size of the difference varies by domain and is greatest in the social and environmental domain. These are domain-specific comparisons and should not be presented as a single aggregated overall quality-of-life distribution.

The higher-category results also vary across domains. In the physical domain, the combined "Good" and "Very Good" proportions are 50.48% among displaced respondents and 51.64% among non-displaced respondents. In the psychological domain, the corresponding proportions are 44.60% and 48.50%; in the social and environmental domain, they are 42.2% and 50.5%. Thus, the difference is small in the physical domain and more pronounced in the social and environmental domain. A pooled overall percentage should only be reported if a separate, clearly defined composite measure has been calculated.

The "Moderate" category also differs across domains: 17.45% versus 18.78% in the physical domain, 28.17% versus 26.00% in the psychological domain, and 25.8% versus 25.0% in the social and environmental domain (displaced versus non-displaced, respectively). The figures therefore do not support a single overall estimate of approximately 25% for the moderate category. Taken together, the domain-specific distributions indicate a generally less favourable pattern for displaced respondents, particularly in the social and environmental domain.

**Cross-Domain Interpretation**

A cross-domain comparison reveals three key patterns:

- **Consistency of Direction**: Across all domains, displaced populations are consistently overrepresented in lower QoL categories and underrepresented in higher categories.
- **Variation in Magnitude**: Disparities are smallest in the physical domain, moderate in the psychological domain, and largest in the social and environmental domain.
- **Cumulative Effect**: Differences become more pronounced when domains are aggregated, indicating that multidimensional disadvantages reinforce one another.

These patterns suggest that displacement operates as a systematic factor associated with lower quality of life, particularly in domains related to social integration and environmental stability.

***Conservation and Human Displacement***

Protected areas such as national parks, wildlife sanctuaries, and tiger reserves are central to biodiversity conservation in India. Globally, conservation-induced displacement (CID) has affected millions of indigenous and forest-dependent populations, often resulting in loss of livelihoods, social disintegration, and cultural erosion (Brockington & Igoe, 2006). In India, the Wildlife Protection Act (1972) and Forest Conservation Act (1980) enabled the declaration of large forest tracts as protected areas, frequently displacing tribal communities (Kothari et al., 1995). While these measures have contributed to biodiversity preservation, they often overlooked the rights, well-being, and socio-cultural needs of forest-dependent populations. Displacement disrupts traditional subsistence practices such as agriculture, grazing, and collection of non-timber forest

produce, further marginalising tribal groups economically and socially (Cernea, 2000).

### *Displacement and Marginalisation of Tribal Populations*

Empirical evidence from India underscores the disproportionate effects of displacement on tribal communities. Fernandes (2008) notes that rehabilitation packages frequently fail to restore pre-displacement living standards. In Madhya Pradesh and Chhattisgarh, entire villages were relocated for tiger reserves without sustainable resettlement strategies (Rangarajan & Shahabuddin, 2006). Similarly, tribal populations displaced from the Srisailam Tiger Reserve have faced long-term challenges in adapting livelihoods, preserving cultural identity, and maintaining psychological well-being (Rao et al., 2011). These recurring patterns reveal systemic neglect in conservation planning, highlighting the vulnerability of indigenous populations when ecological objectives are prioritised over human rights.

### *Concept of Quality of Life (QoL)*

Quality of Life (QoL) is inherently multidimensional, encompassing material, social, and psychological well-being. The World Health Organization (WHO, 1997) defines QoL as an individual's perception of their position in life, including physical health, psychological state, social relationships, and environmental conditions. Amartya Sen's (1999) capabilities approach further emphasises that well-being depends not only on resources but also on the ability to achieve valued functionings, such as access to education, healthcare, and cultural participation. In the context of displacement, QoL frameworks provide a crucial lens for understanding how communities experience changes across multiple life domains.

### *Multidimensional Approaches to Well-Being*

Current well-being assessments adopt a multidimensional perspective, integrating physical health, psychological stability, social integration, and environmental security (Nussbaum & Sen, 1993). Displaced communities often experience deterioration in all these areas. Physical health suffers due to limited nutrition, healthcare, and water access (Cernea & Schmidt-Soltau, 2006). Psychological well-being is weakened by trauma, stress, and cultural loss. Social cohesion is disrupted as kinship networks and traditional structures are dismantled during resettlement. Environmental well-being declines as access to forest resources, central to livelihoods and cultural practices, is restricted. Such integrated approaches reveal the comprehensive impacts of displacement beyond economic losses.

Indeed, the Srisailam Tiger Reserve, one of India's largest, has witnessed the displacement of numerous tribal hamlets. Relocation aimed to reduce human-wildlife conflict and enhance conservation but resulted in impoverishment, food insecurity, and social dislocation (Rao et al., 2011). Similar patterns are observed in Kanha, Nagarhole, and Sariska reserves, highlighting persistent gaps in resettlement planning (Lasgorceix & Kothari, 2009).

As already stated above, although prior studies document the effects of displacement, few systematically assess post-displacement quality of life using integrated frameworks like the WHO model or Sen's capability approach (Walke,2021). Most research narrowly addresses economic or livelihood outcomes, overlooking psychological, social, and environmental dimensions. Specifically, in Srisailam, empirical data on community adaptation, well-being perceptions, and multidimensional QoL remain limited. This study aims to fill that gap by assessing well-being among displaced and non-displaced populations through a holistic, multidimensional approach. This paper delves into the responsible roles of social work activism in the conservation of ecological balance and tribal cultural preservation.

A comparison of the physical domain of quality of life between displaced and non-displaced communities in the Srisailam Tiger Reserve indicates a modest disadvantage among displaced respondents in the lower response categories. The proportions reporting "Very Poor" and "Poor" physical well-being are 14.95% and 17.12%, respectively, among displaced

respondents, compared with 13.15% and 16.43% among non-displaced respondents. The combined proportions are therefore 32.07% and 29.58%, respectively. Although the difference is relatively small, the pattern is consistent with somewhat less favourable self-reported physical well-being among displaced respondents. These descriptive findings do not, on their own, establish that displacement caused the differences.

Graphical studies confirm these tendencies, with displaced respondents overrepresented in the lower categories and underrepresented in the moderate-to-good ranges. Displaced communities also report poorer environmental health, citing displeasure with resettlement sites that lack basic infrastructure. Unlike non-displaced residents, displaced communities face the loss of ecological stability and cultural continuity. Overall, while the differences are not dramatic, the trend consistently puts displaced populations at a disadvantage due to disrupted livelihoods, increased medical dependency, environmental dissatisfaction, and weakened psychological resilience, whereas non-displaced communities maintain greater continuity and adaptation capacity.

**Physical Domain of Quality of Life: Critical Analysis**

The comparative analysis of the physical domain of quality of life among displaced and non-displaced tribal respondents in the Nagarjunsagar–Srisailam Tiger Reserve reveals differences in their reported physical well-being, although the magnitude of these differences is relatively modest. The distribution across the five categories—Very Poor, Poor, Moderate, Good, and Very Good—provides insights into the physical health conditions and the challenges experienced by both populations.

A closer examination of the lower well-being categories indicates that displaced respondents are relatively more disadvantaged. Approximately 14.95% of displaced respondents reported Very Poor physical well-being, compared to 13.15% of non-displaced respondents. Similarly, 17.12% of displaced respondents reported Poor physical well-being, against 16.43% among non-displaced respondents. Thus, the combined proportion in the two lower categories is 32.07% among displaced respondents, compared to 29.58% among non-displaced respondents. This difference of 2.49 percentage points indicates a relatively higher concentration of displaced respondents experiencing unfavourable physical well-being.

However, the differences should not be interpreted as evidence of a substantial deterioration in the physical health of displaced communities. Rather, they indicate a modest but discernible disadvantage that may be associated with the changes in living conditions following displacement. Relocation from traditional forest habitats can alter access to natural resources, traditional food systems, medicinal plants, and established livelihood practices. Such changes may influence nutritional security, occupational patterns, physical activity, and access to healthcare facilities. These factors are particularly relevant for tribal communities whose everyday lives have historically been closely connected with forest ecosystems.

An important aspect emerging from Figure 3 is that the differences between displaced and non-displaced respondents are comparatively limited in the physical domain. Both groups demonstrate representation across the Moderate, Good, and Very Good categories. This suggests that physical well-being is influenced not only by displacement status but also by other factors, including household economic conditions, availability of healthcare services, nutritional practices, age, occupational engagement, and access to basic infrastructure.

From a critical social work perspective, the findings raise questions about the adequacy of rehabilitation measures in addressing the broader health-related needs of displaced tribal populations. Rehabilitation should not be restricted to the provision of residential accommodation or financial compensation. It should also ensure continuity of healthcare services, nutritional security, access to safe drinking water, and opportunities to sustain culturally appropriate livelihood practices.

Particular attention needs to be given to the preservation of traditional knowledge concerning food, healthcare, and the sustainable use of forest resources.

Viewed through Sen's Capability Approach, the relatively less favourable physical well-being reported by displaced respondents may reflect constraints in their opportunities to achieve essential health-related functionings. The loss or restriction of access to familiar natural resources and changes in livelihood environments may affect their ability to maintain health and pursue valued ways of living. Therefore, physical well-being needs to be understood not merely in terms of access to medical facilities but also in relation to the availability of resources and environmental conditions that enable individuals to lead healthy lives.

Overall, Figure 3 indicates that displaced respondents experience a modest disadvantage in physical quality of life compared to non-displaced respondents. Although the difference is not substantial, the pattern highlights the importance of addressing health, nutrition, environmental accessibility, and livelihood-related concerns in rehabilitation programmes. The findings also suggest that conservation policies need to incorporate a broader understanding of physical well-being, recognising the interdependence between tribal health, traditional ecological resources, and sustainable livelihoods.

**Psychological Domain of Quality of Life: Critical Analysis**

The psychological well-being data indicates that displacement has measurable effects on emotional stability, energy, and overall mental health, although the differences between displaced and non-displaced groups are moderate (Figure 4).

In the lower categories of *Very Poor* and *Poor*, displaced individuals (10.80% and 16.43%) report slightly higher levels of psychological strain than the non-displaced (10.00% and 15.50%). This reflects the additional stressors displacement brings, such as uncertainty, loss of cultural belonging, and weakened social networks.

At the *Moderate* level, displaced individuals again form a larger share (28.17%) compared to the non-displaced (26.00%). This suggests that a significant proportion of displaced persons remain in a psychological state where well-being is neither entirely poor nor satisfactory, indicating stagnation in achieving mental stability and resilience.

In the positive categories, the non-displaced group reports slightly higher proportions. In the “Good” category, the figures are 24.00% for non-displaced respondents and 23.47% for displaced respondents. In the “Very Good” category, the proportions are 24.50% and 21.13%, respectively. The chart therefore indicates a modest advantage for non-displaced respondents in the higher psychological well-being categories. The figures alone do not measure specific factors such as emotional balance, self-acceptance, or access to leisure, so these should not be inferred directly from the chart.

The graphical comparison reinforces this interpretation. While the displaced cluster around moderate to poor psychological health, the non-displaced demonstrate a modest but consistent advantage in the positive categories, highlighting the psychological resilience afforded by stability and continuity.

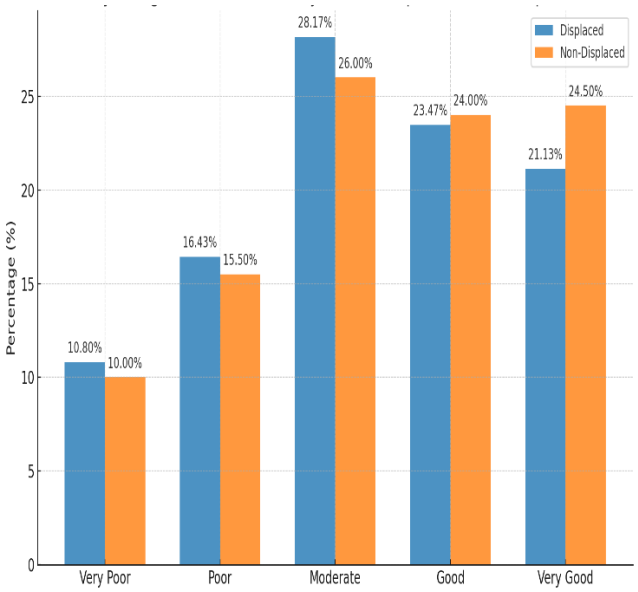



**Figure 4: Psychological Domain of Quality of Life: Displaced Vs Non-Displaced**
**Source: Data Collected from the Field in December 2021**

**Social & Environmental Domain of Quality of Life: Critical Analysis**

The assessment of social and environmental quality of life reveals differences between displaced and non-displaced populations (Figure 5). A greater proportion of displaced respondents report "Poor" quality of life (21.1%) than non-displaced respondents (15.0%). The proportions in the "Very Poor" category are also slightly higher among displaced respondents (10.8%) than among non-displaced respondents (9.5%). These results show that displaced respondents are more represented in the lower response categories. Possible explanations, such as disruption of social networks or difficulties accessing services, require support from the qualitative findings and should not be treated as established by these percentages alone.

In the Moderate category, both groups report similar proportions (25.8% displaced; 25.0% non-displaced), suggesting that many individuals experience only average satisfaction. This parity indicates that broader structural constraints within protected areas, such as restricted services and limited opportunities, affect all residents.

Differences are also visible in the higher categories. The "Good" category includes 32.5% of non-displaced respondents and 30.5% of displaced respondents. In the "Very Good" category, the proportions are 18.0% and 11.7%, respectively. The largest difference is therefore in the "Very Good" category (6.3 percentage points). Overall, the chart indicates more favourable social and environmental ratings among non-displaced respondents. Explanations involving social cohesion, service access, and environmental integration should be linked to the qualitative evidence rather than attributed to the chart alone.

Graphical comparisons reinforce these trends, with displaced individuals concentrated in lower categories and non-displaced overrepresented in higher ones. Overall, displacement negatively impacts social and environmental well-being by undermining stability, access to services, and community support. Addressing these disparities requires targeted policies that strengthen infrastructure, expand health and transport access, and foster social networks in resettled areas, enabling displaced populations to achieve parity with non-displaced communities.

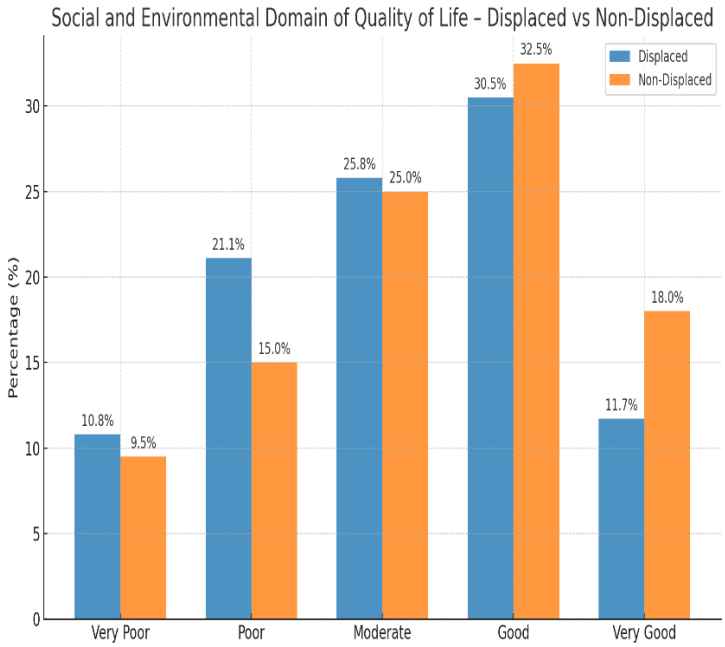



**Figure 5: Social and Environmental Domain of Quality of Life: Displaced Vs Non-Displaced**
**Source: Data Collected from the Field in December 2021**

**Overall Quality of Life**

The overall quality-of-life assessments reveal a concerning trend: both displaced and non-displaced populations within the Srisailam Tiger Reserve occupy the lower end of the well-being spectrum, indicating widespread limitations across physical, social, and environmental domains. This suggests that structural constraints, such as conservation restrictions, exert significant pressures on all residents, resulting in generally low life satisfaction.

However, displacement emerges as a compounding factor that intensifies vulnerability. The Very Poor and Poor categories together encompass a notably higher proportion of displaced individuals (10.8% and 21.1%) compared to non-displaced residents (9.5% and 15.0%). This disparity reflects the additional hardships faced by displaced populations, including disrupted livelihoods, weakened social networks, and restricted access to essential services. While both groups contend with systemic challenges, displacement exposes individuals to greater instability and risk.

In the Moderate category, the proportions are nearly similar (25.8% displaced and 25.0% non-displaced), underscoring that structural limitations impact all residents. Yet, even here, displaced individuals remain more susceptible to the adverse consequences of these constraints, as they lack the buffering effects of established social ties and environmental familiarity.

The contrasts become more pronounced in the higher categories. Non-displaced respondents are more likely to report Good (32.5%) and Very Good (18.0%) quality of life, while displaced individuals report only 30.5% and 11.7%, respectively. This indicates that stability of residence, continuity of cultural and social connections, and stronger access to resources confer relative advantages to non-displaced populations, allowing them to perceive life more positively despite overall low well-being.

The overall distribution highlights a critical pattern: both groups exhibit generally low quality of life, but displacement magnifies vulnerability, concentrating displaced individuals in the lower categories and limiting their access to the factors that could enhance life satisfaction. Displacement thus acts as a multiplier of disadvantage, creating long-term consequences for resilience, social cohesion, and overall well-being.

While all residents of the Srisailam Tiger Reserve face structural and environmental constraints that suppress quality of life, displacement

imposes additional burdens that make affected populations systematically more vulnerable. Addressing this disparity requires interventions beyond physical or economic support, including the restoration of social networks, improved infrastructure, and equitable access to essential services in resettlement areas. Only through such comprehensive measures can the persistent gap between displaced and non-displaced populations be meaningfully reduced.

**Discussion**

The findings of this study demonstrate that conservation-induced displacement is associated with systematically lower quality-of-life outcomes across multiple domains, though the magnitude of impact varies. While both displaced and non-displaced populations experience constraints linked to conservation regulations, displacement introduces an additional layer of disadvantage that is most visible in social and environmental dimensions of well-being.

Interpreted through the lens of Sen's capability approach, these results suggest that displacement constrains not only material resources but also the substantive freedoms individuals require to lead lives they value. The loss of access to land, forest resources, and traditional livelihoods reflects a reduction in economic capabilities; however, the findings indicate that losses in relational and cultural capabilities are equally significant. Disruption of kinship networks, weakening of community cohesion, and detachment from culturally meaningful environments limit individuals' ability to participate in social life and sustain identity. These forms of capability deprivation are less visible than income loss but have enduring implications for well-being.

The domain-specific variation observed in the results provides further insight into the dynamics of post-displacement adaptation. Differences in the physical domain are relatively modest, suggesting that basic needs such as health and subsistence may be partially restored through resettlement support and adaptation over time. In contrast, the more pronounced disparities in social and environmental domains indicate that reconstruction of social capital and environmental familiarity is significantly more challenging. These findings support the argument that displacement is not a discrete event but an ongoing structural condition, where initial disruptions give rise to long-term constraints on well-being.

The persistence of moderate-level outcomes across both groups also highlights the role of broader structural factors. Conservation regimes impose restrictions on resource use, mobility, and livelihood practices that affect all residents within protected areas. However, displaced populations are less equipped to navigate these constraints due to the loss of embedded knowledge systems and support networks. As a result, displacement amplifies vulnerability within an already constrained socio-ecological context.

These findings are consistent with existing scholarship in political ecology and development studies, which critiques exclusionary conservation models for reproducing social inequalities. The evidence from this study reinforces the view that conservation policies, when implemented without meaningful community participation, can undermine both social justice and long-term sustainability. Importantly, the relatively stronger outcomes among non-displaced populations suggest that continuity of residence, cultural embeddedness, and social cohesion function as protective factors that mitigate the adverse effects of conservation-related restrictions.

The study also highlights the limitations of current rehabilitation frameworks. While resettlement programs often address immediate material needs—such as housing or financial compensation—they tend to overlook the multidimensional nature of well-being. In particular, insufficient attention is given to rebuilding social networks, ensuring access to culturally appropriate livelihoods, and restoring a sense of environmental belonging. Without addressing these dimensions, rehabilitation efforts risk producing only partial and uneven recovery.

Overall, the findings underscore the need to reconceptualise conservation as a socio-ecological process that integrates ecological objectives with human capabilities and rights. A shift toward participatory and inclusive conservation models is essential, not only to mitigate the adverse impacts of displacement but also to enhance the legitimacy and effectiveness of conservation efforts themselves.

**Social Work Activism in Conservation**

Social work, traditionally centred on human welfare, has increasingly embraced ecological consciousness as an essential dimension of practice. As Pulla (2014) argues in *Towards the Greening of Social Work Practice*, social work must extend its ethical responsibility beyond human systems to the natural environment, recognising the interdependence of social and ecological well-being. This expanded mandate positions the social work activist as a dual advocate—protecting both vulnerable communities and the ecosystems on which they depend.

In *Constructing a Social Work Environmental Dialogue*, Pulla and Pathare (2018) emphasise that ecological justice and sustainable development must become core concerns within social work. Social work activists play a pivotal role in facilitating dialogue between communities, policymakers, and conservation authorities. Their work involves mobilising participation, building awareness, and ensuring that conservation strategies uphold social equity rather than reproduce structural disadvantage. This environmental dialogue transforms social work into a movement committed to ecological balance and human rights.

Maheswari and Yesudian (2025), in *Green Social Work: Understanding the Impact of Social Work Education on the Environment*, further highlight the need for eco-literacy within social work education. Activists equipped with environmental knowledge can strengthen community resilience, promote sustainable livelihoods, and advocate for climate-responsive and culturally grounded practices. Their interventions support responsible resource management and empower communities to adapt without compromising cultural identity or autonomy.

Walke's (2021) analysis in *Tribals in Tiger Territories of Vidarbha* underscores the urgency of such activism. Tribal communities, as traditional custodians of forests, possess invaluable ecological knowledge, yet conservation policies often displace them and destabilize their cultural and economic foundations. Social work activists must therefore mediate between conservation imperatives and tribal welfare, advocating for participatory models that protect biodiversity while safeguarding Indigenous heritage.

To address the persistent disadvantages faced by displaced populations within the Srisailam Tiger Reserve, rehabilitation programs must be restructured to extend beyond immediate resettlement. Long-term infrastructure development, improved access to health, education, and transport services, and sustainable livelihood opportunities tailored to local conditions are essential. These measures strengthen physical and psychological well-being while enhancing community resilience.

Equally critical is including tribal voices in conservation and development planning. Policies must integrate local knowledge, cultural practices, and community priorities, ensuring that resettlement strategies are participatory rather than imposed. Meaningful engagement in decision-making empowers communities, reinforces social networks, and reduces marginalisation.

Sustainable development strategies must align with cultural and environmental values, balancing ecological conservation with socio-economic needs. Eco-friendly livelihoods, community-managed resources, and culturally sensitive education and health initiatives can mitigate displacement-related harms while preserving identity and cohesion.

Interventions should also prioritise psychosocial support and community integration, recognising the interconnectedness of physical, psychological, social, and environmental

domains. Capacity-building initiatives alongside strengthened local governance and targeted social programmes can reduce vulnerability and enhance adaptive capacity.

Ultimately, an integrated, multidimensional approach—combining infrastructure development, livelihood security, social inclusion, and cultural sensitivity—is essential. Social work activism is central to this transformation. By championing environmental justice, promoting inclusive conservation, and protecting the interdependence between nature and Indigenous cultures, social work activists serve as critical agents in shaping conservation governance that is equitable, participatory, and sustainable.

**References**

Brockington, D., & Igoe, J. (2006). Eviction for conservation: A global overview.*Conservation and Society, 4*(3), 424–470. https://www.jstor.org/stable/26396810

Cernea, M. M. (2000). Risks, safeguards and reconstruction: A model for population displacement and resettlement. In M. M. Cernea & C. McDowell (Eds.), *Risks and reconstruction: Experiences of resettlers and refugees* (pp. 11–55). World Bank. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/442021468766493047

Cernea, M. M., & Schmidt-Soltau, K. (2006). Poverty risks and national parks: Policy issues in conservation and resettlement. *World Development, 34*(10), 1808–1830. https://doi.org/10.1016/j.worlddev.2006.02.008

Dominelli, L. (2012). *Green social work: From environmental crises to environmental justice*. Polity Press. https://politybooks.com/bookdetail/?isbn=9780745654016

Fernandes, W. (2008). Sixty years of development-induced displacement in India: Scale, impacts, and the search for alternatives. In H. Mander & S. Anand (Eds.), *Words to win: The making of Amar Shaheed* (pp. 126–147). Indian Social Institute.

Germain, C. B., & Gitterman, A. (1980). *The life model of social work practice*. Columbia University Press. https://cup.columbia.edu/book/the-life-model-of-social-work-practice/9780231041272

Gray, M., Coates, J., & Hetherington, T. (Eds.). (2013). *Environmental social work*. Routledge. https://www.routledge.com/Environmental-Social-Work/Gray-Coates-Hetherington/p/book/9780415678117

International Federation of Social Workers. (2018). *Global social work statement of ethical principles*. https://www.ifsw.org/global-social-work-statement-of-ethical-principles/

Ife, J. (2012). *Human rights and social work: Towards rights-based practice* (3rd ed.). Cambridge University Press. https://www.cambridge.org/core/books/human-rights-and-social-work/8E6C6B0C9E2F4F1A9F8F0C2A1E6A0F8E

Kothari, A. (2013). Conservation and communities: Notes from India. *Economic and Political Weekly, 48*(49), 38–45. https://www.epw.in/journal/2013/49/commentary/conservation-and-communities.html

Kothari, A., Pathak, N., Anuradha, R. V., & Taneja, B. (1995). *Communities and conservation: Natural resource management in South and Central Asia*. Sage Publications. https://in.sagepub.com/en-in/sas/communities-and-conservation/book203492

Lasgorceix, A., & Kothari, A. (2009). Displacement and relocation of protected areas: A synthesis and analysis of case studies. *Economic and Political Weekly, 44*(49), 37–47. https://www.epw.in/journal/2009/49/special-articles/displacement-and-relocation-protected-areas.html

Maheswari, K., & Yesudian, B. J. Y. (2025). Green social work: Understanding the impact of social work education on the environment. *International Journal of Social Science Research*

*and Review, 8*(7), 344–351.https://ijssrr.com/journal/article/view/1234

Nussbaum, M., & Sen, A. (1993). *The quality of life*. Oxford University Press. https://global.oup.com/academic/product/the-quality-of-life-9780198287971

Pulla, V. (2014). Towards the greening of social work practice. *International Journal of Innovation, Creativity and Change, 1*(3), 141–165. https://www.ijicc.net/images/vol1iss3/Pulla_2014.pdf

Pulla, V., & Pathare, S. (2018). Constructing a social work's environmental dialogue. *International Journal of Social Work and Human Practice, 6*(4), 118–124. http://www.horizonresearchpublishing.com/journals/ijsw

Rangarajan, M., & Shahabuddin, G. (2006). Displacement and relocation from protected areas: Towards a biological and historical synthesis. *Conservation and Society, 4*(3), 359–378. https://www.jstor.org/stable/26396806

Rao, C. H. (2016). Relocation of tribal communities and its impact: A case study of Andhra Pradesh. *Journal of Social Development Studies, 12*(1), 45–59. https://journal.ugm.ac.id/v3/JSDS

Rao, K. S., Sinha, S., & Rao, K. (2011). Displacement and rehabilitation: Experiences from Srisailam Tiger Reserve. *Indian Journal of Human Development, 5*(2), 327–345. https://journals.sagepub.com/doi/10.1177/0973703020110209

Reddy, V. R. (2017). Biodiversity, conservation and livelihoods: The case of Srisailam Tiger Reserve. *Indian Journal of Human Ecology, 25*(2), 165–174. http://krepublishers.com/journalofhumanecology.html

Sen, A. (1999). *Development as freedom*. Alfred A. Knopf. https://www.penguinrandomhouse.com/books/160067/development-as-freedom-by-amartya-sen/

Walke, K. (2021). *Tribals in tiger territories of Vidarbha: Issues and challenges*. AlterNotes Press. https://www.alternotespress.com/product/tribals-in-tiger-territories-of-vidarbha/

World Health Organization. (1997). *WHOQOL: Measuring quality of life*. https://apps.who.int/iris/handle/10665/63482

**Ethical Approval**

The study involved research with human participants from tribal communities. Hence, the research was conducted in accordance with applicable ethical principles and standards governing research involving human participants. Ethical considerations relating to voluntary participation, confidentiality, privacy, informed consent, and respectful engagement with participating communities were observed throughout the research process.

**Conflict of Interest**

The author(s) declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**Funding**

This research was financially supported by the TRI Division, Ministry of Tribal Affairs, Government of India, under File No. 15025/16/2019-R & M dated 27 March 2020. The funder provided financial support for undertaking the research. The author(s) are solely responsible for the research design, data collection, analysis, interpretation of findings, and the content of this article.

**Informed Consent**

Informed consent was obtained from all participants prior to their participation in the study. Participants were informed about the purpose and nature of the research, the voluntary nature of their participation, their right to decline participation or withdraw, and the manner in which the information provided by them would be used. Appropriate measures

were adopted to maintain the confidentiality and anonymity of participants and their responses.

**Data Availability**

The data generated and/or analysed during the current study are not publicly available due to confidentiality and privacy considerations associated with research involving tribal communities and individual participants. The data may be made available by the corresponding author upon reasonable request, subject to applicable ethical requirements, participant confidentiality, and necessary permissions.

**Author Contributions**

Both authors contributed significantly to the conception and design of the study, the formulation of research objectives and methodology, fieldwork and/or data collection, as well as the analysis and interpretation of the findings. They also collaborated in drafting and critically revising the manuscript. Furthermore, both authors have reviewed and approved the final version and accept responsibility for all aspects of the work, including the accuracy and integrity of the research.

**Acknowledgements**

The authors gratefully acknowledge the TRI Division, Ministry of Tribal Affairs, Government of India, for extending financial support to this research under File No. 15025/16/2019-R & M dated 27 March 2020. They also express their sincere appreciation to the tribal communities and participants whose experiences and perspectives were invaluable to the study's completion. The cooperation and assistance of local stakeholders and authorities during the fieldwork are likewise deeply appreciated.

**Declaration Regarding the Use of Artificial Intelligence**

The author(s) declare that generative artificial intelligence tools were not used to generate the substantive research findings, research data, analysis, or conclusions reported in this article. Where applicable, AI-assisted tools may have been used only for limited language editing, formatting, or proofreading. The author(s) retain full responsibility for the originality, accuracy, interpretation, and integrity of the manuscript.