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# Regional Inequalities and Human Development in Karnataka: An Analysis Using HDI, GDI And Social Indicators

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## Abstract

This paper examines the persistence and structure of regional inequality in human development within Karnataka, India, through the lens of the human capability approach. Moving beyond income and growth rates, it analyses how freedoms and opportunities are unevenly distributed across districts and taluks, and how these disparities intersect with gender, caste, minority status and infrastructure gaps. The study relies exclusively on secondary data drawn primarily from the Karnataka State Human Development Report 2022, earlier state HDRs (1999, 2005, 2015), Census 2011, multidimensional poverty measures and micro-level district and taluk studies. Adopting a descriptive-analytical strategy rather than formal econometric modelling, it tracks long-term patterns in HDI, Gender Equality Index, SC/ST Multidimensional Poverty Index, minority HDI and key social infrastructure indicators. The findings reveal a striking stability in the state's development hierarchy. Coastal and southern districts such as Bengaluru Urban, Dakshina Kannada, Udupi and Kodagu continue to record high human development, while Kalyana Karnataka districts—including Raichur, Yadgir, Koppal, Ballari and Kalaburagi—remain clustered at the bottom. Low HDI is closely associated with weak gender equality, high intensity of SC/ST deprivation, very low minority and ST HDI in specific taluks, and deficits in drinking water, sanitation, housing, electricity and health facilities. Taluk-level evidence shows that severe deprivation can be concealed within seemingly moderate districts, underscoring the limits of district averages for policy design.

The paper argues that Karnataka's development pattern is structurally "two-speed": dynamic in the south and coast, stagnant in the north, with multiple disadvantages reinforcing one another over time. It concludes that incremental, scheme-based interventions are inadequate. Instead, a long-term, regionally differentiated strategy is required, centred on girls' education, gender equality, targeted support for SC/ST and minority communities, infrastructure strengthening in lagging districts, and a need-based reorientation of public expenditure towards high-deprivation taluks. By integrating regional, social and gendered dimensions of deprivation within a single analytical framework, the study contributes evidence useful for more finely targeted human development planning in Karnataka.

**Key Words:** Human development, gender inequalities, regional inequalities weaker sections and Gender Inequality.

**JEL codes:** J15, J16, O18, R12 and I38.

## 1. Introduction

When discussions about "development" surface in popular or academic circles, they often begin with GDP figures or growth rates. Yet, for more than three decades now, scholars associated with the UNDP—Amartya Sen, Mahbub ul Haq and many others—have reminded us that development must be understood in a much broader sense (Sen 1999; Haq 1996; UNDP 1990). It is less about the sheer volume of economic output and far more about what individuals are able to do, to be and to achieve in their lives. This shift in perspective has encouraged researchers and governments alike to look beyond the conventional metrics and pay attention to health, education, gender equality and standards of living. Karnataka's story fits remarkably well within this broader framework. While the state has made significant economic progress—often outperforming national averages—the advantages of this growth have not spread evenly across its geography. Anyone who compares data from the coastal and southern districts with those from Kalyana Karnataka will see

stark differences in literacy levels, access to health services, infrastructure quality and social indicators (GoK 1999; GoK 2005; GoK 2015).

These variations were formally acknowledged as early as 1999, when the first Karnataka Human Development Report came out (GoK 1999). That report was something of a watershed moment. It systematically documented disparities and highlighted that districts like Dakshina Kannada, Kodagu, Udupi and Bengaluru Urban were doing considerably better than Raichur, Gulbarga (now Kalaburagi), Bidar and Ballari. For many, this validated what had long been observed in day-to-day life. The HDRs that followed—those of 2005 and 2015—revealed a rather unsettling truth (GoK 2005; GoK 2015). Although there were improvements in absolute terms, the relative ranking of districts barely shifted. This absence of convergence suggests that what Karnataka is dealing with is not a temporary imbalance but a structural and deeply embedded form of inequality. Over time, researchers have begun referring to the northern region as being "trapped" in underdevelopment.

One of the most important interventions in this debate came from the High-Power Committee on Redressal of Regional Imbalances, headed by D. M. Nanjundappa (HPC 2002). The Committee's 2002 report offered a more fine-grained taluk-level analysis and uncovered a pattern that was hard to deny: the majority of the "most backward" taluks were geographically clustered in the Hyderabad-Karnataka region. The Committee went further to identify the drivers of these disparities—limited irrigation, weak industrial establishment, fragile educational and health networks, and inadequate transport and water infrastructure. Two decades later, KSHDR–2022 revisits these issues with updated data and a sharper analytical lens (KSHDR 2022). This report not only confirms the persistence of old inequalities but also expands the conversation by including gender equality, caste-based poverty, minority development, and social infrastructure. Particularly noteworthy is the inclusion of taluk-level minority HDI and SC/ST MPI, which expose layers of deprivation not visible through district averages.

Against this backdrop, the present study attempts to do three things. First, it revisits the spatial pattern of human development across Karnataka using updated indicators. Second, it examines the intersections of gender, caste, minority identity and geography. Third, it reflects on what these persistent disparities imply for policy design. The broader question underlying this inquiry is simple but profoundly important: Why has Karnataka been unable to narrow its internal development gaps despite economic growth and repeated policy interventions? The answer, as this study will show, lies in a complex mix of historical neglect, social hierarchies, infrastructural deficits and uneven patterns of public investment.

## 2. Literature Review

Human development has been widely discussed in development economics as a framework that goes beyond income and growth to include education, health, dignity, and equal opportunities (Sen, 1999). Within this broader understanding, Karnataka has often been highlighted as a state that combines strong economic growth with marked spatial inequalities. Several studies have drawn attention to the long-standing contrast between the southern and coastal districts, which generally perform well on social indicators, and the northern and northeastern regions, where progress has been slower (Sharma, 2001). These differences have been linked to historical disparities in irrigation networks, land ownership, and the uneven spread of public investment over time (Rao, 2005).

Research examining district-level Human Development Index (HDI) values consistently notes that the pace of improvement is uneven. Districts with diversified economies, better transport networks, and strong educational institutions tend to maintain higher HDI scores (Kulkarni, 2010). On the other hand, areas dependent on rain-fed agriculture or lacking industrial presence continue to experience slow gains in literacy, health outcomes, and per capita income (Patil, 2014). This literature collectively suggests that economic modernisation in Karnataka has benefited some regions far more than others.

Gender differences form another central theme in the human development discourse. Analyses based on the Gender Development Index (GDI) indicate that even districts ranking high in income or education often show gaps in women's mobility, labour participation, and health outcomes (Nair, 2012). Scholars argue that entrenched social norms, unequal household responsibilities, and limited decision-making power hinder progress for women, especially in rural and semi-rural areas (Ramesh, 2015). This body of work suggests that gender inequality in Karnataka is shaped not

only by economic constraints but also by deep-rooted cultural practices.

Another rich strand of literature focuses on caste and minority identity. Many studies point out that Scheduled Castes and Scheduled Tribes often have lower access to education, healthcare, and quality employment despite overall improvements in state-level indicators (Thorat & Newman, 2010). Research further shows that caste-segregated settlement patterns and unequal access to public goods reinforce long-term disadvantages (Rajendran, 2016). Similarly, works addressing the situation of minority communities highlight gaps in educational attainment, limited representation in formal employment, and experiences of social exclusion (Ahmed, 2017). These findings underscore the need to examine human development not just across regions but across social hierarchies as well.

Spatial analyses using mapping techniques show clear clustering of low human development indicators in the Kalyana Karnataka region, reinforcing the geographical dimension of inequality (Balasubramanian, 2020). Scholars note that such disparities are tied to structural constraints and cannot be addressed solely through short-term welfare measures (Krishnaswamy, 2021). Instead, long-term investments in health, education, women's empowerment, and local infrastructure are viewed as essential.

Policy-oriented literature stresses decentralised, region-specific approaches for reducing inequality. Although Karnataka has implemented several targeted schemes, researchers observe that gaps persist due to administrative challenges, uneven resource allocation, and limited institutional capacity (Shetty, 2019).

Taken together, the literature identifies three recurring themes: (1) regional disparities in Karnataka remain firmly entrenched; (2) gender, caste, and minority identity intersect to shape unequal human development outcomes; and (3) policy interventions must address structural barriers to reduce long-standing inequalities.

## 3. Research Methodology

The study uses a descriptive–analytical methodology to examine Karnataka's complex regional inequalities. Since human development indicators interact in multidimensional, context-specific ways, strict econometric models may oversimplify these relationships. Instead, this approach focuses on interpreting patterns, understanding socioeconomic contexts and tracing long-term structural trends across districts and taluks to reveal deeply embedded forms of disparity.

### 3.1 Data Sources

The analysis relies entirely on secondary data, though the sources themselves are rich, authoritative and multi-layered. The core dataset comes from the Karnataka State Human Development Report 2022 (KSHDR–2022). This report is by far the most detailed compilation of human development statistics for the state and includes a wide range of district- and taluk-level indicators that would be almost impossible to gather independently. To understand long-term trends, earlier state HDRs published in 1999, 2005 and 2015 have also been used. These reports make it possible to examine the stability or movement of district rankings over time. In addition, Census 2011 data, NITI Aayog's National MPI indicators, and district-specific studies (particularly those focusing on Raichur, Kalaburagi and Ballari) have been incorporated to enrich the analysis.

### 3.2 Indicators Used in the Study

The indicators were chosen not simply because they are available but because they illuminate different facets of human development. They include:

- Human Development Index (HDI): A composite measure combining education, health and standard of living.
- Gender Development Index (GDI) and Gender Equality Index (GEI): These capture not only gender gaps but also the structural disadvantages that women face in different districts.
- Multidimensional Poverty Index (MPI) for SCs and STs: Important because poverty in Karnataka is not only spatial but also social. MPI shows both incidence and intensity of deprivation.
- Minority HDI (taluk-level): This is one of the most revealing indicators in KSHDR–2022, as it exposes pockets of deprivation that district-level HDI often hides.
- Social Infrastructure Indicators: These include access to drinking water, sanitation, electricity, permanent housing, and clean cooking fuel. Without these, the broader human development narrative remains incomplete.

Together, these indicators allow a multi-dimensional reading of inequality—one that moves beyond income or GDP.

### 3.3 Analytical Strategy

The analysis unfolds in several stages.

#### Step 1 — Regional Grouping

Districts are grouped into four broad regions:

1. Coastal Karnataka
2. Southern Karnataka
3. Northern Karnataka
4. Kalyana Karnataka

This helps identify spatial clustering—where certain indicators consistently align with certain regions.

#### Step 2 — Trend Analysis

Using HDRs from 1999, 2005, 2015 and KSHDR–2022, the study looks not only at changes in HDI values but, more importantly, at changes (or the lack thereof) in district rankings. The persistence of rankings is a crucial insight into structural inequality.

#### Step 3 — Social Group Analysis

MPI values for SC and ST communities, as well as taluk-level minority HDI values, are examined to uncover how social identity intersects with geography.

#### Step 4 — Taluk-Level Microanalysis

Taluk-level indicators—often overlooked in policy documents—are especially important because many pockets of deprivation are concentrated within specific taluks rather than entire districts.

#### Step 5 — Interpretative Correlation

The final stage involves interpreting the relationships between:

- HDI and GEI
- Infrastructure and regional development
- Social group inequality and regional backwardness

These are not formal statistical correlations, but interpretative linkages supported by extensive empirical evidence.

### 3.4 Limitations of the Study

Like any research relying on secondary data, this study faces limitations that must be acknowledged openly.

- Data Timeliness: Some indicators (especially those in KSHDR–2022) are based on data collected around 2019–20. Post-pandemic changes cannot be fully captured.
- Taluk-Level Data Availability: Taluk-level HDI is available for social groups (SCs, STs, minorities) but not for entire populations, limiting direct comparisons.
- Inherent Constraints of Descriptive Analysis: While this approach allows rich interpretation, it does not claim causal inference.

Despite these constraints, the dataset is strong enough, and the patterns robust enough, for meaningful insights to emerge.

## 4. Analysis and Discussion

Any attempt to understand Karnataka's development landscape has to confront a somewhat uncomfortable truth: although there has been progress over time—progress that is real and measurable—the spatial distribution of this progress remains extremely uneven. One gets the feeling, when looking at the numbers side-by-side, that Karnataka contains several “mini-states” within itself, each moving at its own pace and along its own trajectory. The analysis below tries, as far as possible, to capture this complexity.

### 4.1 Regional Patterns in Human Development: A Landscape That Refuses to Shift

The first place to begin is with the human development map itself. According to KSHDR–2022, Karnataka's HDI stands at 0.633 (based on 2019 data). That figure in isolation looks respectable, and compared to earlier decades, it undeniably marks improvement. But the real insights emerge only when we unpack the district-level values and, more importantly, their relative positions over time. Districts such as Bengaluru Urban, Dakshina Kannada, Udupi, and Kodagu—long celebrated for their educational achievements, health services and economic dynamism—continue to occupy the highest ranks. They did so in 1999. They did so in 2005. They did so in 2015. And 2022 tells precisely the same story.

On the opposite end, Raichur, Yadgir, Koppal, Kalaburagi, and Ballari remain entrenched at the bottom. It is almost as if the regional hierarchy froze two decades ago and, despite repeated interventions and developmental rhetoric, simply refused to budge. This lack of mobility is revealing. It indicates that regional inequality is not merely a statistical inconvenience. Rather, it reflects a deeper layering of historical, social and institutional forces—forces powerful enough to override incremental development gains. One cannot help but wonder: if two decades of programmes, investments and schemes did not significantly alter the hierarchy, what kind of structural imbalances must be at play?

### 4.2 Gender Inequality: A Parallel Geography of Disadvantage

The Gender Equality Index (GEI) in KSHDR–2022 adds another layer to this picture—one that is both fascinating and worrying. When gender indicators are mapped across districts, they reveal a geography that mirrors Karnataka's HDI map almost perfectly.

High GEI Values: Bengaluru Urban (0.729), Udupi (0.667) and Hassan & Kodagu (around 0.630)

Lowest GEI Values: Raichur (0.364), Yadgir (0.396), Ballari (0.4230) and Bagalkot (0.4544)

This alignment is startling. It suggests that regions that lag in human development are also regions in which women enjoy fewer freedoms, fewer opportunities, and lower access to education, employment and health. It is often treating gender inequality as a social problem separate from broader economic development. But here it becomes clear that gender inequality is not just a byproduct of backwardness—it is a contributor to it. In many northern districts, women continue to face barriers that women in coastal and southern Karnataka have largely overcome. Restrictions on mobility, limited access to higher education, lower labour participation and inadequate health services collectively depress overall development outcomes. This is not merely correlation; it is part of a multidimensional causality loop.

### 4.3 SC/ST Multidimensional Poverty: Social Identity and Geography Overlap

Another angle through which Karnataka's inequality becomes visible is the Multidimensional Poverty Index (MPI) for Scheduled Castes (SCs) and Scheduled Tribes (STs). MPI helps us see deprivation not only in terms of income but across several dimensions—nutrition, schooling, health vulnerability, sanitation, water access and living conditions.

KSHDR–2022 reports the following:

- SC MPI incidence: 0.113
- ST MPI incidence: 0.157
- SC MPI intensity: 0.42
- ST MPI intensity: 0.43

What stands out is not just that SCs and STs experience more poverty, but that their deprivation is geographically concentrated. The highest MPI values occur in: Raichur, Yadgir, Koppal, Ballari, and Kalaburagi. These districts are the same ones that suffer from low HDI and low GEI. This is an important finding because it challenges simplistic explanations of poverty as an individual-level condition. Instead, it shows that caste-based deprivation is spatialised—it overlaps with regional backwardness, amplifying the intensity of disadvantage. It also raises an uncomfortable but necessary question: How does one design state-wide policy when the geography of disadvantage is so sharply concentrated?

### 4.4 Minority Deprivation: The Hidden Layer Most District Data Miss

If the experience of SCs and STs is visible in district-level data, the experience of minority communities becomes clearer only when one descends to the taluk-level. This is one of the areas where KSHDR–2022 provides an invaluable contribution.

Take a closer look at minority HDI values: **Koratagere**: 0.14, **Mandya taluk**: 0.21, **T. Narasipur**: 0.23, **Honnali**: ~0.23. These numbers are shockingly low—far lower than district HDI values.

What this tells us is that district averages can be deeply misleading. A district like Mandya, which appears moderately placed in aggregate rankings, contains taluks with minority populations experiencing severe deprivation—often hidden from policy attention because aggregates wash away these pockets. Minority deprivation, therefore, is both highly localised and structurally produced. It interacts with low schooling completion, limited employment diversification, and restricted access to health facilities.

### 4.5 Taluk-Level ST HDI: The Most Startling Micro-Regional Inequality

If minority HDI reveals hidden deprivation, then ST HDI at the taluk level reveals something even more jarring. Many ST communities live in areas that are doubly disadvantaged—geographically remote and institutionally neglected. Consider the following values: Vijayapura (ST HDI): 0.13, Kalaburagi taluk: 0.19, Bagalkot taluk: 0.20, Gadag taluk: ~0.17, Channapatna taluk: 0.23. These numbers are not marginally low; they indicate extreme deprivation. In contrast, ST HDI in certain southern taluks is surprisingly high: Bengaluru North: 0.75, Challakere: 0.74, Molkalmuru: 0.73. This widespread—from 0.13 to 0.75—illustrates the profound internal diversity of Karnataka. It also emphasises that taluk-level planning is not optional—it is essential.

### 4.6 Infrastructure Inequalities: The Foundation of Regional Disparity

Infrastructure may sound mundane—pipes, wires, roads, taps—but it forms the backbone of human development. The KSHDR–2022 documents district-level disparities in several key infrastructure categories: Home electrification levels, Access to piped drinking water, Household sanitation, Clean cooking fuel usage, Permanent housing structures. Once again, backward districts cluster together: Yadgir, Raichur, Koppal, Kalaburagi. A household without piped water places an enormous burden on women and girls. A household relying on biomass fuel suffers long-term health impacts. A lack of sanitation exposes entire communities to disease cycles that keep children out of school. In this sense, infrastructure is not merely physical—it is developmental.

### 4.7 Public Expenditure and Resource Allocation: The Policy Blind Spot

An often-overlooked insight from KSHDR–2022 is the decline in human development expenditure as a share of GSDP between 2015–16 and 2020–21. This decline is significant. Backward districts rely far more on public investment than developed districts, which have diversified economic bases. When public expenditure stagnates, the cost is disproportionately borne by those who can least afford it. Study also shows that development expenditure is not always aligned with need. In some cases, districts with lower human development indicators do not receive correspondingly higher per capita allocations. This mismatch undermines the potential for convergence.

### 4.8 Integrated Interpretation: What the Evidence Tells Us

When viewed collectively, the evidence from HDI, GEI, MPI, minority HDI, ST HDI and infrastructure reveal a remarkably consistent pattern:

1. Coastal and Southern Karnataka continue to enjoy structural advantages. These regions have stronger educational institutions, better health networks, more urbanisation, and more diversified economies.
2. Kalyana Karnataka remains structurally disadvantaged. Historical neglect, inadequate infrastructure, caste- and gender-based barriers, and weaker institutions all converge here.
3. Gender inequality is not a separate issue; it is woven into regional backwardness.
4. Caste and community deprivation intensifies regional inequality.
5. Taluk-level inequalities are far sharper than district-level data suggests.



6. Public expenditure has not been strategically aligned with needs.

## 5. Findings

After performing through the various indicators and piecing together the layers of evidence, several findings emerge with a clarity that is difficult to ignore. They are not surprising in themselves—anyone familiar with Karnataka's development debates would recognise the patterns—but the extent to which these patterns persist, and the depth at which they operate, is striking. The findings, therefore, are not mere restatements of data; they are reflections on the structural nature of Karnataka's regional inequality.

### 5.1 Regional Disparities Remain Deep, Persistent, and Structurally Embedded

The first and most unmistakable finding is that Karnataka's regional inequality is not receding. In fact, the hierarchy observed in the 1999 HDR remains almost entirely intact more than twenty years later. Districts such as Bengaluru Urban, Udupi, Dakshina Kannada and Kodagu maintain consistently high HDI values, while Raichur, Kalaburagi, Yadgir, Ballari and Koppal remain at the lower end of the spectrum. The endurance of this ranking pattern suggests that these disparities are structural, not cyclical. They are maintained by a combination of historical neglect, uneven investment patterns, and deeply entrenched social inequalities. It becomes clear that growth alone does not resolve spatial inequities unless intentionally directed toward backward regions.

### 5.2 Gender Inequality is Both a Symptom and a Driver of Regional Backwardness

Another critical finding concerns gender. The GEI values show that districts with low gender equality almost always exhibit low human development. In areas like Raichur or Yadgir, low female literacy, limited participation in the labour force, restricted mobility, and weak political representation create conditions where half the population's potential remains underutilised. This is not simply a question of social justice; it is a fundamental development issue. Regions that treat women as secondary economic actors inevitably fall behind in broader human development outcomes. Karnataka's gender map, therefore, acts as a near-exact mirror to its development map. A district cannot progress when half its human capital is constrained.

### 5.3 Caste-Based Deprivation Intensifies Regional Inequality

The third major finding is that social group inequalities—particularly those affecting Scheduled Castes and Scheduled Tribes—are not evenly distributed. MPI values show that SCs and STs in Karnataka face not only higher rates of poverty but also deeper forms of deprivation. These disadvantages are most concentrated in the very districts that are already struggling—Raichur, Ballari, Koppal, Yadgir and parts of Kalaburagi. Thus, regional backwardness and caste-based deprivation reinforce one another. A SC/ST household in a backward district begins life with multiple constraints: limited land ownership, poor access to nutrition, low-quality schooling, higher vulnerability to illness, and lower access to credit or formal employment. These layered disadvantages mean that poverty is not only more likely but more difficult to escape.

### 5.4 Minority Deprivation Reveals Hidden Micro-Regions of Underdevelopment

One of the most striking findings from the taluk-level analysis is that minority communities face severe disadvantages in specific taluks—

even when their broader districts appear moderately placed. The very low minority HDI values in Koratagere (0.14), Mandya (0.21), and T. Narasipur (0.23) show that human development cannot be understood only at the district scale. These pockets of deprivation often lie hidden and receive limited policy attention because district averages fail to reveal their severity. This suggests that certain communities—particularly minorities in specific taluks—remain invisible in state-level planning despite being among the most deprived.

### 5.5 Infrastructure Deficits are Central to the Persistence of Backwardness

If there is one factor that appears repeatedly across all backward districts, it is the lack of essential infrastructure. The analysis indicates that districts with poor access to sanitation, drinking water, electricity, durable housing, health facilities and road connectivity are also the ones with the lowest HDI.

This is not coincidental. Infrastructure shapes daily life in immediate and long-term ways:

- Poor sanitation increases disease burden.
- Unreliable water supply restricts household and economic productivity.
- Lack of electricity affects learning, especially for children from low-income families.
- Poor roads and transport limit access to markets, schools, hospitals and public services.

Backwards districts repeatedly find themselves caught in an infrastructure trap, where social deficits prevent economic growth, and lack of growth prevents infrastructure investment.

### 5.6 Public Expenditure Patterns Do Not Adequately Address These Inequalities

Another important finding is that Karnataka's public expenditure has not been sufficiently targeted toward backward regions. The decline in social sector spending relative to GSDP between 2015–16 and 2020–21 is particularly concerning, because backward districts rely heavily on state-driven investment. In theory, development expenditure should flow disproportionately to lagging regions. In practice, this is not consistently happening. A region burdened by historical disadvantages cannot catch up without sustained, targeted investment. Without this, the gap widens—or at the very least, remains frozen.

## 6. Policy Recommendations

The analysis clearly indicates that Karnataka's regional disparities are long-standing and structurally driven. Isolated schemes or short-term initiatives have failed to shift the development trajectory of lagging regions, particularly Kalyana Karnataka. Addressing these entrenched inequalities requires a comprehensive, region-sensitive and sustained strategy that integrates social, infrastructural, fiscal, and institutional reforms. The following recommendations highlight priority areas where corrective interventions can produce meaningful change.

### 6.1 Strengthen Education Systems in Backward Districts, with a Special Focus on Girls

Education is central to reducing regional disparities, yet backward districts show weak school facilities and low female literacy. Improving girls' education through better infrastructure, trained teachers, residential schools, transport support, and digital resources

can significantly uplift health, employment and overall human development, especially in regions like Raichur and Yadgir.

### 6.2 Position Gender Equality as a Core Development Priority

Gender inequality mirrors Karnataka's broader regional divide; districts with poor gender outcomes consistently underperform developmentally. Promoting gender equity requires safe hostels, subsidised mobility, stronger SHGs, credit access and tailored skill programmes for women. Including women in local planning bodies is essential for ensuring gender-responsive policies and balanced regional development.

### 6.3 Address SC/ST and Minority Deprivation through Targeted Interventions

SC/ST and minority communities face deep, multidimensional deprivation. Targeted action must focus on the most disadvantaged taluks identified through MPI and HDI data. Scholarships, hostels, bridge courses and livelihood support should be expanded, alongside strong enforcement of anti-discrimination norms, to ensure these groups gain equal access to opportunities and services.

### 6.4 Expand Social Infrastructure in High-Deprivation Areas

Infrastructure deficits significantly hinder development in northern districts. Improving piped water, sanitation, electricity, housing and healthcare is essential. Strengthening rural roads and upgrading primary health centres with staff and equipment will enhance education, health and employment outcomes. Robust social infrastructure forms the foundation for long-term, equitable human development.

### 6.5 Reform Public Expenditure to Reflect Regional Needs

Public spending must align with regional deprivation. Increasing social sector expenditure, adopting a need-based allocation formula and directing higher per capita funds to backward districts are crucial. Transparent monitoring and stronger fiscal accountability at district and taluk levels will improve efficiency and ensure investments genuinely reach the most disadvantaged regions.

### 6.6 Institutionalise Taluk-Level Human Development Planning

Taluk-level disparities often remain hidden within district averages. Establishing Taluk Human Development Committees and preparing local plans based on HDI, GEI and MPI indicators ensures targeted interventions. Empowering local officers with autonomy and training, along with community-based monitoring, strengthens accountability and ensures development efforts reach the most deprived pockets.

### 6.7 Adopt a Long-Term, Multi-Sectoral Development Strategy

Karnataka's inequalities require a coordinated, long-term strategy spanning 10–20 years. Integrating education, health, gender equality, infrastructure and social inclusion is essential for sustainable improvement. A multi-sectoral approach, rather than short-term schemes, is necessary to overcome historic structural barriers and promote inclusive growth across all regions of the state.

## 7. Conclusion

A broader view of Karnataka's development landscape reveals a pattern of inequality that is deep, layered and historically shaped. These disparities cannot be traced to a single cause or corrected through isolated initiatives. Instead, they arise from interconnected disadvantages—regional imbalances, gender gaps, caste-based exclusion, and uneven infrastructure—that reinforce one another over time. One of the strongest insights emerging from decades of evidence is the remarkable stability of Karnataka's development

hierarchy. From the HDRs of 1999, 2005 and 2015 to the most recent KSHDR–2022, the same pattern persists: coastal and southern districts continue advancing, while Kalyana Karnataka struggles to close the gap. This demonstrates that underdevelopment is embedded in long-term historical processes rather than recent administrative shortcomings. It reflects systemic differences in access to resources, opportunities and institutional support.

Gender inequality further illustrates this structural divide. Districts that limit women's education, mobility and participation in decision-making consistently record lower HDI values. Similarly, high MPI levels among SC/ST populations in districts already lagging in development show how social identity intensifies spatial disadvantage. For many families in Raichur, Yadgir or Ballari, caste and geography combine to shape a cycle of deprivation that no single policy can easily break. Another key finding is that district averages mask severe deprivation within specific taluks. Minority and ST communities in places such as Mandya, T. Narasipur and Koratagere experience much lower human development levels than district-wide data suggests. This highlights the necessity of taluk-level planning to address hidden pockets of exclusion.

Infrastructure gaps—lack of drinking water, sanitation, healthcare and road connectivity—remain central drivers of backwardness and are concentrated in the same regions facing other forms of deprivation. Compounding this challenge is inadequate and uneven public spending, particularly in the social sector. Ultimately, Karnataka's path to equitable development requires long-term, region-specific strategies focused on gender equity, social inclusion, infrastructure strengthening and targeted fiscal investment. Sustainable progress will depend on recognising these inequalities as central obstacles and designing interventions that reach the most deprived communities at the taluk level.

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