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List of Abbreviations

CM	Chief Minister
EG	Economic Growth
GDP	Gross Domestic Product
GOI	Government of India
GSDP	Gross State Domestic Product
HD	Human Development
IIR	India Infrastructure Report
IMR	Infant Mortality Rates
NSDP	Net State Domestic Product
TFR	Total Fertility Rate
YoY	Year on Year

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1. Introduction

In 1980, Indian per capita gross domestic product (GDP) was a meagre $271.2, ranking below a number of war-torn African states, and on a par with conflict-ridden Afghanistan and politically unstable Mozambique (World Bank, 2012a). By 2013, Indian per capita GDP had risen to $1.498.9, growing at an average rate of 6% per annum through the 1990s, increasing to over 7% in the 2000s (Ibid).[1] From the mires of near-stagnation under British colonial rule and the ensuing 'Hindu rate of growth', India's recent success in economic growth (EG) is commendable.

However, the pace of improvement of India's human development (HD) since 1980 is worrying; indeed, "the history of world development offers few other examples of an economy growing for so long (in per capita GDP terms), with such limited results in reducing human deprivations" (Drèze & Sen, 2013:ix). In 1980, India's Human Development Index (HDI) value was 0.339, falling into the 'low HD' category (UN, 2014). By 2011, India's HDI value had increased to 0.547, but remained in relative terms, dismally low (Ibid). Of the 16 poorest states in the world outside of Sub-Saharan Africa in 2011, India ranked 10th for infant mortality rate (IMR), 10th for child mortality, 11th for female literacy, and worst in terms of child malnourishment (Word Bank, 2012a), despite having the highest per capita GDP. Moreover, India has fallen behind every other South Asian nation, excluding Pakistan, in the scale of social indicators of living

[1] Growth rates in real terms.

standards (World Bank, 2012b).[2] To describe contemporary India's developmental trajectory as 'defective', would be euphemistic.

Notwithstanding that India is set to become the "world's fastest growing large economy later this year" (Lagarde quoted in Chan, 2015), HD progress remains disappointing. Accepting the well-established developmental rubric that EG should "ultimately be judged in terms of its impact on the lives of people" (Drèze & Sen, 2013:viii), Indian EG drastically needs to affect commensurate improvement to HD. In March 2007, Barack Obama lauded India's graduation from a 'rising power' to a power 'already risen'. If India has indeed 'risen', then it "has risen despite its terrible poverty…despite the deprivation that has left millions living in medieval conditions" (Kapur, 2010).

India's developmental conundrum has engendered a "renewed focus on achieving EG with inclusion" (Hirway et al., 2014:1), from development scholars, UN agencies, and Indian policymakers alike, prompting the emergence of a hotly contested debate.[3] Recent policy discourses exemplify this focus: the principal objective of India's 'Eleventh Five-Year Plan' was to deliver "faster EG with

[2] See Drèze & Sen (2013:49-52) for a detailed presentation of this data.
[3] As Sen (2005) argues, there is no unified vision to which India gives its allegiance. Therefore, discussion of what exactly HD should entail, is highly contested. However, a key way that India interprets HD, is as a 'process of change' and hence, the rates of change of key HD indicators are central to debates concerning Indian HD (McCartney, 2015).

inclusion" whilst the 'Twelfth Five-Year Plan' called for "faster, more inclusive and sustainable EG" (Planning Commission, 2007; 2012).[4]

Whilst 'lessons' from successful developing countries (the 'four tigers' and post-reform China) are frequently cited in the Indian growth-development debate, increasingly, attention has turned to India's internal diversity. India's extensive regional variations, both in experience and achievement of development, "are a rich source of insights" (Drèze & Sen, 2002:71). The experiences of Gujarat and Kerala have been identified as two polar 'models' of development, which could inform wider development policy.

Both the Indian, and wider growth-development debate have polarized around the experiences of these two states. Advocates of the Gujarat 'model' evidence the fact that:

> "Gujarat is richer, enjoys faster GDP growth and a greater intensity of jobs and industry than India as a whole. Modi's reputation for economic competence rests on his record here. When Indians voted for him…last May, it was in large part because they wanted the country run as Gujarat is" (*The Economist,* 2015a).

[4] Though inclusive EG, and EG that improves HD are not perfectly synonymous, the former exhibits a statistically significant, strong positive correlation with positive improvement to HD (Iancovichina & Lundstrum, 2009:7).

Proponents of the Kerala 'model' argue:

> "Despite the fact that the economic growth of Kerala has been sluggish…it has been able to achieve tremendous results in important areas such as literacy, life expectancy and mortality rates. The Indian government should try to emulate the Kerala experience" (Sen, 1993: 46).

These polar 'models' act as representatives for two competing traditions in development theory: EG-led, and HD-led development respectively. Yet few scholars question the integrity of orthodox presentations of both states; their status is largely sacrosanct. This paper, therefore, examines the validity of conventional characterizations of Gujarat and Kerala, seeking to overcome the "shroud of academic opacity" (Raman, 2010:1) that has consumed the Indian growth-development debate. The importance of this research, explicated in 2.3, is threefold: both 'models' wield great influence in academic circles, have been recommended for other states and all-India to emulate, and hold significant ideological implications.

The research question is split into two basic enquiries:

1.) *Is Gujarat's economic growth exceptional compared to other Indian states, all-India, and other LDCs?*
2.) *Are Kerala's human-development achievements exceptional compared to other Indian states, all-India, and other LDCs?*

Are these states as exemplary as their respective proponents claim?

After finding that Gujarat's EG is overstated and that Kerala's HD is exceptional, this paper argues that neither state provides a credible 'model of development', per se. Whilst 'Modi's Gujarat' might offer a 'model of governance', Kerala's path to high HD attainment is not replicable, nor altogether desirable (see '6.').

This paper proceeds as follows: '2.' presents the research problem; '3.' provides a concise critical literature review; '4.' outlines the methodology; '5.' presents the analysis of the respective 'models'; and, '6.' explores the implications of the findings.

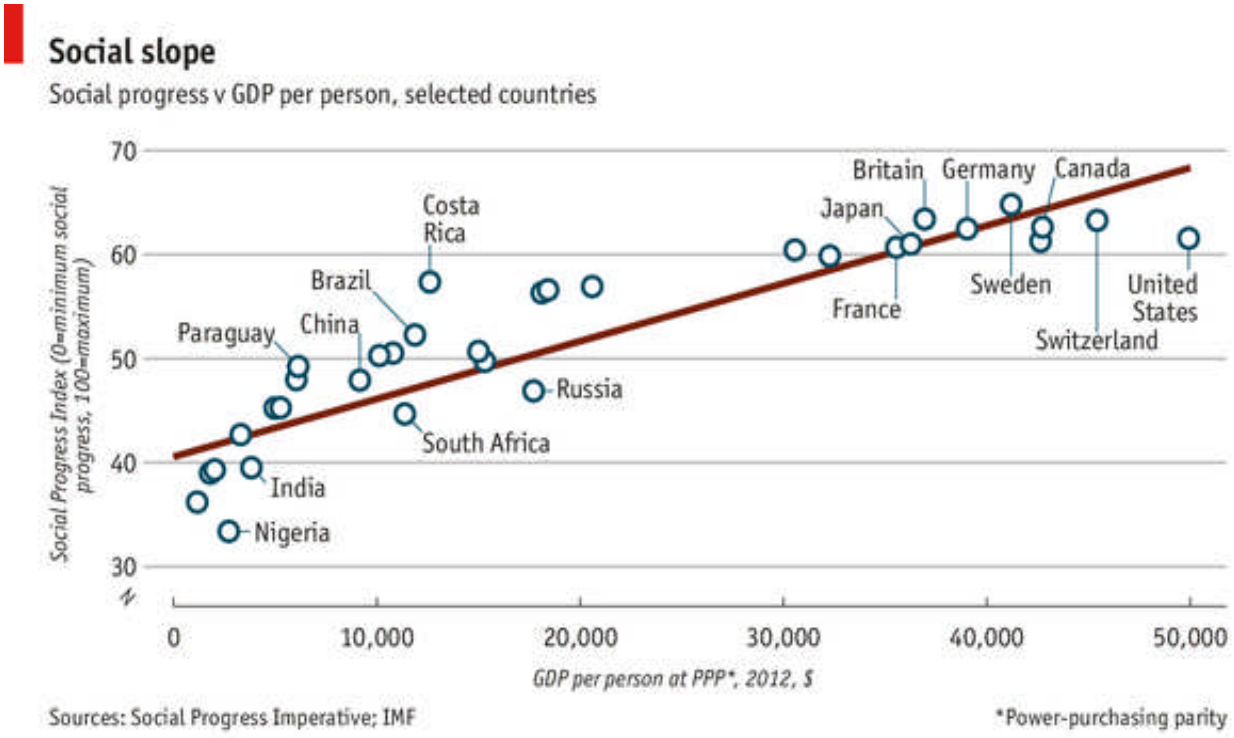
2: Research Problem

This section introduces the general development theory and its application to India, and then presents a three-part rationale for undertaking the research.

2.1 The Theory: Economic Growth and Human Development

There exists a strong positive correlation between EG and HD. As figure 1 illustrates, high per capita GDP is associated with high HD (measured here by the 'Social Progress Index'). India, however, is an outlier, sitting below the trend line; for India's per capita GDP, one would expect a higher level of 'Social Progress' (HD).

Figure 1: Social Progress vs. GDP per person



(*The Economist,* 2013)

At a theoretical level, explaining the general EG-HD positive correlation is intuitive. Two 'chains' constitute the relationship, one from EG to HD, the other from HD to EG, with the strength of each chain conditioned by various 'linkages'.

EG can affect improvements in HD, through government and household activity, with civil society also playing a role (Ranis et al., 2000:198). Three ratios express the influence of Indian government activity on HD; government expenditure as a proportion of total GDP, the proportion of total government expenditure that goes to HD sectors, and the total HD sector expenditure that is targeted at priority areas, such as healthcare and education (Ibid:199-201). Whilst Indian

government expenditure on HD sectors is comparatively low,[5] several factors exacerbate the ratios further: tax collection is characterized by "indifference, incompetence, and corruption" (Pritchett, 2009: 3); service delivery, particularly education, is poor (Chaudhury et al, 2006); and related constraints, particularly caste and gender based discrimination, (Kumar, et al., 2009) prevent EG translating to commensurate gains in HD. Indian households' propensity to purchase HD-promoting items also impacts this chain,[6] as does the orientation of civil society organizations towards HD objectives. Typically, government activity is the foremost element, although in certain cases, pertinently through broad horizontal mobilization in Kerala (Heller, 1996), civil society has ensured EG gains benefit HD.

The 1980s witnessed the development of endogenous growth theories, stressing the central role of HD in galvanizing EG by "enhancing people's capabilities and consequently their creativity and productivity" (Ranis et al., 2000:201).[7] Essentially, healthier, better-educated people have a greater capacity to generate EG. Though in India, a poorly functioning labour market (Besley & Burgess, 2002), evidenced by unemployment, discrimination, and systematic misallocation of factors of production, has damaged the 'chain' from HD to EG.

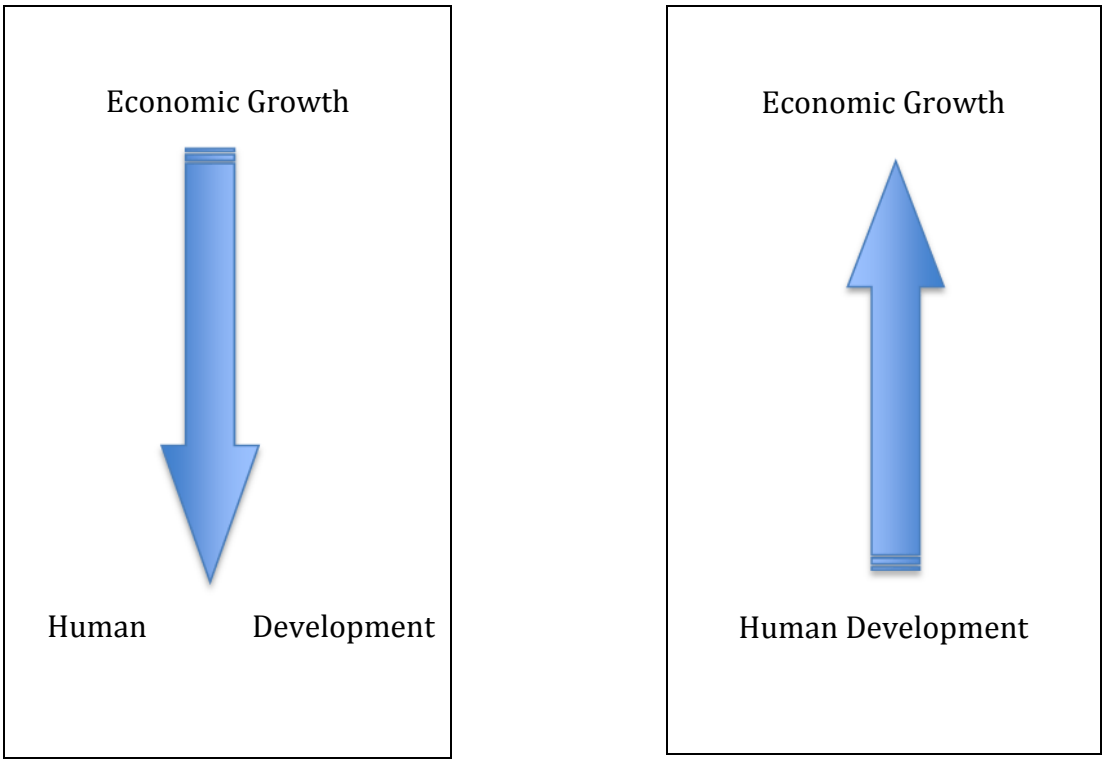
The two major theoretical streams concerning the EG-HD relationship reflect the multi-directional nature of the correlation. Classical 'trickle-down' theory assumes the benefits of EG will gradually pass through society, hence implying

[5] See (OECD, 2014), for evidence of India's low expenditure on healthcare.
[6] See Drèze & Deaton's (2009) discussion of India's 'nutrition crisis'.
[7] For seminal works, see Romer (1986) and Lucas (1988).

that "EG is both a *necessary and sufficient condition* for the improvement of lives" (MacPherson & Lau, 1996:1).[8] Exponents of classical theory champion EG-led models of development. When HD replaced EG as the "ultimate objective of human activity"[9] (Ramirez et al., 1998:2), a second stream emerged. 'Trickle-up' theories emphasize initial HD improvements by satisfying "basic human needs like health and education" (Ramanathaiyer & MacPherson, 2000: 5), arguing that such improvements promote subsequent EG. Advocates of this perspective support HD-led models of development. Figure 2. illustrates the theories diagrammatically.

[8] Bhagwati (1996:532) refers to EG-led development as 'pull-up', rather than 'trickle down' (which could subliminally imply "benign neglect").
[9] 1990s UN Development Reports (see, ul Haq, 1990) increasingly emphasized the importance of HD, advocating measures like Sen's capabilities approach.

Figure 2: Approaches to Development



('Trickle Down')

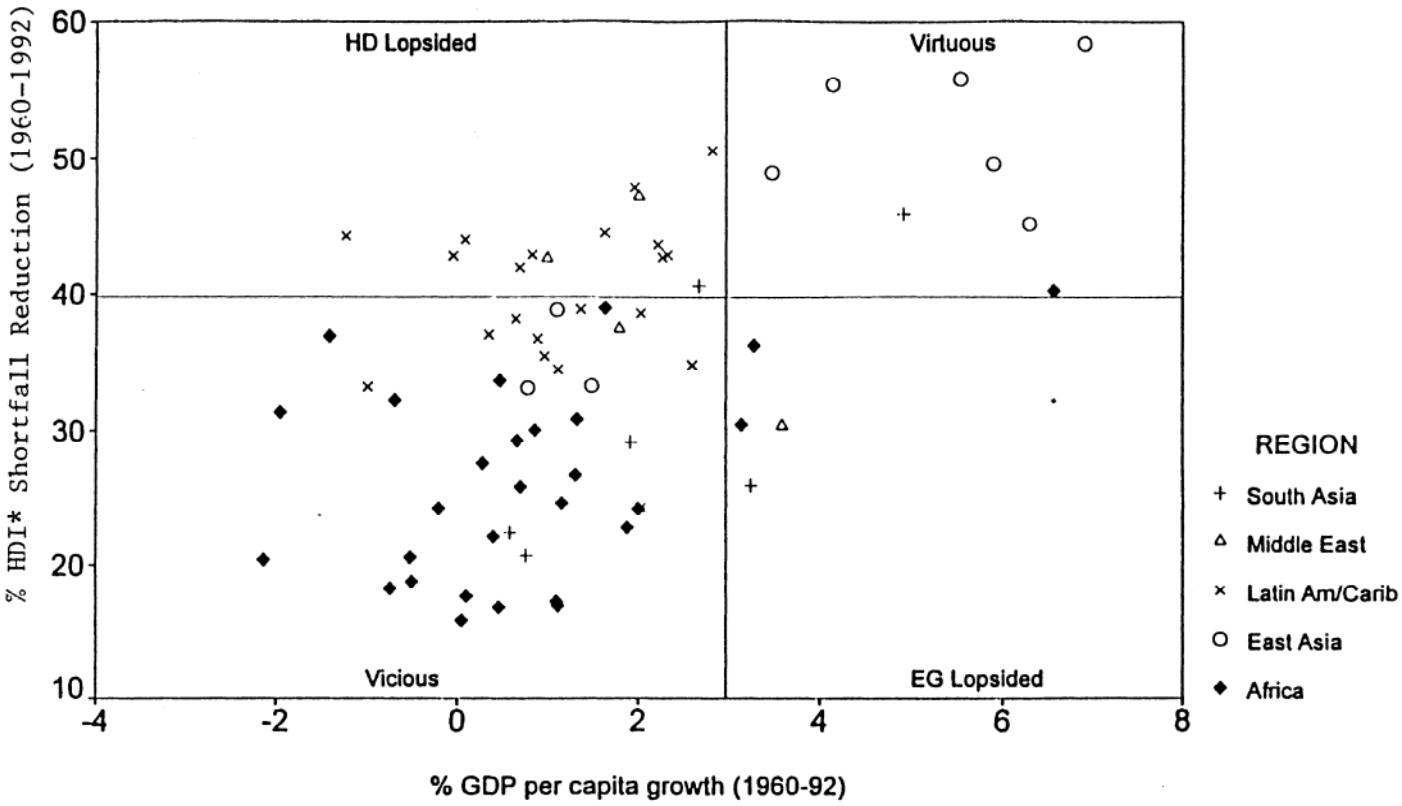
('Trickle up')

2.2 Empirical Evidence

From 1960-1980, India languished in the 'vicious development' quadrant shown on Figure 3, with low EG and low HD fostering a self-perpetuating downward developmental spiral (Ramirez et al. 1998). Since 1980, barring dips in 1991 and 2008, Indian EG has flourished (Pritchett, 2009: 2) but Indian remains firmly 'EG-lopsided'. More worryingly, of the eight EG-lopsided nations in 1960, all ultimately relapsed to the vicious category: "whilst HD lopsidedness permitted

movement towards virtuous development, all cases of EG lopsidedness eventually reverted to vicious cycles" (Ramirez et al., 1998:12).

Figure 3: Classification of Country Performance (1960-92)



(Ramirez et al. 1998: 55)

Indeed, beyond the general positive correlation of the aggregate EG-HD relationship, there exist many outliers. Like India, South Africa, Brazil, Pakistan, and 'rentier states' in the Arabian Gulf, have all failed to convert EG gains into HD improvement (EG-lopsided).[10] Conversely, Costa Rica, Sri Lanka, Cuba, and China

[10] Pakistan is a striking example of EG-lopsidedness where social indicators lag behind nations of comparable income. Easterly (2003: 468) argues that whilst Pakistan might evidence that a degree of per capita EG is achievable without commensurate HD growth, "growth alone is not enough for broader HD".

in the 1970s (though less so today), all achieved strong HD at low levels of EG (HD-lopsided).[11] Identifying a shared characteristic that might help explain the anomalistic behaviour of these nations proves difficult. The group consists of large and small, island and landlocked, densely and sparsely populated, autocratic and democratic, as well as, Christian, Islamic, and secular states. At an empirical level, the EG-HD relationship is highly complex.

Given the clarity of development theory and the complexity of the EG-HD relationship in practice, how should we view Gujarat and Kerala, lauded as EG-led and HD-led models respectively? Has Gujarat achieved rapid EG or, has Gujarat's EG been unspectacular, with comparable gains realized elsewhere? Has Kerala's HD been exceptional or, has it been romanticized by a literature eager to overcome entrenched beliefs that Indian HD has been comprehensively underwhelming? Are these states exemplary, or simply representative of wider regional trends in India?

2.3 Significance of the Project

The need to investigate presentations of Gujarat and Kerala as exemplary 'models of development' is threefold.

Firstly, orthodox presentations of both states carry significant influence among Indian scholars and policymakers, as well as among development practitioners in the wider debate. Sen has been "instrumental in continuously highlighting

[11] Donaldson (2008) provides a comprehensive summary of the outliers.

Kerala's positive achievements in achieving a relatively high quality of life, despite relative economic backwardness" (Kurien, 1995:70), whilst Bhagwati & Panagariya (2012) and Debroy (2012), frequently celebrate Gujarat as an archetypal development 'model', where neoliberal policy has delivered rapid EG.

Secondly, exponents of the states argue they are appropriate 'models' for others to emulate. The Kerala 'model' has been identified as "one worth emulating because it is seen to have taken the state to high levels of HD and democratic governance" (Raman, 2010:1) whilst the Gujarat 'model' is championed for its ability to "deliver the fastest rates of EG in India" (Dixit, 2014:30). These grand narratives, one of progress, equality, and HD, the other of strong governance and rapid EG, are deeply entrenched. However, as Sood (2012) notes, it is important to examine the integrity of these models given that they have been recommended for all-India, with certain state government's already vying to emulate them. Indeed, the fixation on Gujarat and Kerala has arguably inhibited investigation into other equally 'worthy' states. Tamil Nadu has achieved commendable developmental success of late, but discussion of a 'Tamil model' of development is largely absent (Kalaiyarasan, 2014: 55). Uttarakhand's 10% average annual growth of per capita net state domestic product (NSDP) during the 2000s was the highest in India (CSO, 2014), yet there is no discussion of an 'Uttarakhand model' of development. Is this fixation with Gujarat and Kerala justified, or have entrenched narratives fostered complacency within the literature, inhibiting interrogation of other noteworthy states?

Furthermore, there are significant ideological and political implications of both models. If Gujarat is as exemplary as proponents claim, Gujarati leaders will likely gain an upper hand in Indian politics (Hirway et al. 2014:3). Indeed, Gujarat's acclaimed EG success led many to believe Gujarat's Chief Minister (CM) Narendra Modi, had demonstrated prime ministerial qualities. Following the 2014 Lok Sabha elections, these sentiments were substantiated as the positive public perception of the 'Gujarat model' was widely acknowledged to have played a central role in the BJP election victory (The Hindu, 2011). Whilst, Bhagwati & Panagariya openly support the BJP regime, Sen opposes it; the 'Modi' and 'anti-Modi' factions in India appear to have appropriated the respective models. Exposing any implicit ideological biases conditioned by the political positionality of the model's proponents, is an important task of this paper.

Finally, the Indian growth-development debate has become increasingly contested and politicized, largely due to the way orthodox presentations of Gujarat and Kerala as explicitly polar 'models', have framed the discussion. An excerpt from Bhagwati's (2015) recent article captures this contestation:

> "Although Dr. Sen and I are in fundamental disagreement over important issues of public policy, which required us to debate issues to produce an informed citizenry, he refused to enter into a debate…Does an Indian Nobel Laureate make pronouncements like he was Moses laying down the Ten Commandments, and suffer no dissent?"

Bhagwati (2012) has also labeled Sen's HD-centric approach 'anti-growth', suggesting Sen has explicitly harmed India's poor by opposing economic liberalization and downplaying the importance of EG in development. Other scholars have abstained from engaging in the debate altogether, refusing to "join the media circus in India that is blowing up the differences of opinion between two respectable economists" (Bardhan, quoted in Ullekh, 2013).

Given these interrelated factors, an objective approach is urgently required to rigorously interrogate the claims of the competing camps.

3. Literature Review

This section critically examines the seminal portrayals of the Gujarat and Kerala 'models' of development, to "situate the project in its relevant context" (Hart, 2010:19) and demonstrate how it fits into the congested body of existing literature. The role of '4.' is to demonstrate that this paper's methodology is more rigorous than existing studies, thus able to reach an objective conclusion about the characterization of the 'models'.

3.1. Gujarat

The literature celebrating the 'Gujarat model' is uniform in identifying the model's principal success: the delivery of rapid EG. Bhagwati & Panagariya (quoted in, The Economic Times, 2013) offer the most vehement endorsement of the 'model', arguing that Gujarat is "a metaphor for a primarily EG driven

development". Panagariya (2012) even ascribes Gujarat "miracle status", in relation to its recent economic success. Specifically, these scholars claim that since the mid-1990s, and particularly in the first eight years of the new millennium, Gujarat's EG rate has been consistently higher than the rest of India (Morris, 2014). Archetypal substantiations of such claims read as follows:

> "Gujarat punches above its weight. With just 5% of India's population, it accounts for 7.6% of its GDP, almost a tenth of its workforce, and 22% of its exports…the state's annual GDP growth under his (Modi's) watch averaged almost 10%, a faster rate than India as a whole" (The Economist, 2015a).

This same article describes Gujarat's recent EG as 'Growth à la Modi' (Ibid), clear affirmation of the success of neoliberal policies pioneered by Modi, Gujarat's CM from October 2001 till May 2014. Indeed, the literature demonstrates an explicit tendency to place CM Modi at the heart Gujarat's EG success. An official BJP election campaign leaflet referred to 'Modi's Gujarat Model' (BJP, 2014), whilst Modi's own Prime Ministerial website cites how "under his leadership, Gujarat was known for its development orientated governance…an approach that attracted tremendous praise across India, and the world" (Narendra Modi, 2014). Moreover, proponents have coined the term 'Modi-nomics', describing an "efficient and incorruptible style of economic governance" (Ghatak & Roy, 2014a).

By linking Modi's tenure as CM with Gujarat's EG success and ascribing Modi's Gujarat 'model status', the orthodox literature is highly problematic. The literature is characterized by a parochial focus on assessing Gujarat's EG under the Modi state-government, thus displaying a systematic neglect of the broader historical backdrop to the supposed 'miracle growth' of the 2000s; limited attention is given to Gujarat's EG before Modi, and the related claim that Gujarat's EG success was a historical, path-dependent process, rather than a strictly 'Modi-centric' phenomenon.

The 'pro-Gujarat' literature typically frames Gujarat's EG 'success' relatively; Biswas (2012) refers to Gujarat as "one of India's fastest-growing states", for example. Framing 'success' in relative terms, the literature overlooks the expectations or potential for EG in Gujarat, prior to Modi's tenure. Development theory presents a plethora of factors, each proven to influence a region's EG potential: most notably, geography, institutions, infrastructure, the diaspora, and natural resource endowments. The literature does not systematically consider Gujarat's performance against these 'indicators of potential'. Furthermore, the 'growth miracle' might seem less 'miraculous' when viewed in the context of Gujarat's strong potential for EG in 2000, before Modi took office.

Whilst exponents of Gujarat claim recent EG is unequivocally impressive, this position itself has also become increasingly contested (Bagchi et al. 2005; Dholakia, 2009). The overwhelming focus on Gujarat's EG success is arguably to the detriment of the EG achievements of other noteworthy states, like Maharashtra, Haryana, Tamil Nadu, and Bihar (Nagaraj & Pandey, 2013). The

orthodox literature avoids direct comparisons between Gujarat and these high-performing states, preferring to frame Gujarat's success in relation to the EG rates of poorer states, and all-India. Additionally, scant regard is shown for examining Gujarat's EG in relation to EG of high-performing developing economies.

Finally, it is worth acknowledging the methodological inconsistency that characterizes the 'pro-Gujarat literature'. At a basic level, it is simply necessary to sidestep the convolutions of this muddled literature. Examining the raw data and presenting the 'plain facts' of Gujarat's EG, although ostensibly simplistic, will help overcome the inherent methodological complexity and confusion.

3.2. Kerala

The literature celebrating the primacy of the 'Kerala model' is also uniform in identifying the state's principal success: the achievement of exceptional HD outcomes. From the mid-1970s, social scientists observed that Kerala, "although an area of the 'Third World'" (Jeffrey, 1992: 4), exhibited unusual social statistics; it's HD indicators displayed similar attainment to the 'First-World'. Since Sinha's (1977) seminal work, the literature celebrating Kerala's HD outcomes has proliferated, with the 'model' itself inspiring a change in the focus of international development thinking away from EG and toward HD.[12] The most

[12] A movement pioneered by Pakistani economist Mahbub ul Haq (1990).

vocal advocates of Kerala's success, Drèze & Sen (2002: 85), argue the state is "an exceptional case of outstanding achievement in the social field".

The 'Kerala model' is widely argued (Franke & Chasin, 1989; Jeffrey, 1992; Drèze & Sen, 1995, 1997; Kannan, 1995; Parayil, 2000; Heller, 1996) to be the outcome of broad horizontal mobilization across diverse sections of Malayali society, which ensured government was committed to reforms based on the interests of the poor majority, though Herring (1983; 1989) contests this claim.[13]

Advocates of the 'model' substantiate their claims by evidencing Kerala's success across a range of HD indicators, with individual indicators claimed to reflect various aspects of HD. For example, analyzing data for 2001, Drèze & Sen (2002: 84) cite Kerala's impressive 'Sex Ratio' as demonstrating that the state has managed to overcome gender imbalances that plague other parts of India. Other widely referenced HD indicators include, 'life expectancy at birth', 'total fertility rate' (TFR), 'literacy rate', 'infant mortality rate' (IMR), and the 'head-count index of poverty'.

Exponents of Kerala's 'development experience' exhibit a systemic neglect of problematizing the use of these HD indicators, assuming they adequately capture the full extent of the empirical reality in Kerala. This abject failure to rigorously interrogate Kerala's HD is a critical flaw in the orthodox literature, and poses a fundamental problem for the 'model's' credibility. This flaw is also indicative of

[13] As this paper adjudicates whether Kerala's HD outcomes are exemplary, rather than offer explanations for how these outcomes came about, this debate is less pertinent, though touched upon in '6.'

the complacency Kerala has fostered within development circles, as a 'model' that is unchallenged; "the Kerala model as taught, explained, and researched, remains trapped within a recycled paradigm of progress and development for all" (Raman, 2010: 4). Increasing recognition of these problems has prompted piecemeal investigation into the coverage of HD within Kerala, but the 'pro-Kerala' narrative remains predominant.

This complacency can be seen in the orthodox literature through the systematic failure to distinguish between 'levels' and 'rates' of change in discussion of HD indicators. Bhagwati & Panagariya (2012) argue that viewed in terms of 'rates', Kerala's recent HD performance has been lacklustre, with the data revealing a convergence, rather than divergence of HD across Indian states. Whilst proponents of Kerala tend to discuss success in terms of levels of HD, this gives no indication of progress.

The complacency is also manifest through a failure to examine the future for Kerala, as orthodox literature exhibits a categorical disregard for the sustainability of the 'model'. The predominant narratives stressing HD success and comprehensive state welfare provision, subordinate meaningful investigation into Kerala's financial health and economic structures, both likely to underpin the future functioning of the 'model'. Kerala's heavy reliance on remittance income is a concern in this regard, but also a critical problem for HD success given that a large portion of remittances are earned in the Middle East where HD is notoriously poor. Given Malayali diaspora, by definition, reside beyond the state's borders, their plight is widely disregarded in the literature.

However, given the central role they have assumed in funding the 'model', this represents another failing of the literature.

3.3. Conclusion

This section has sought to highlight the central flaws in the orthodox presentations of the competing development 'models': specifically, an acute failure to look beyond the 'numbers' (data), and interrogate the ideas of EG and HD. The 'pro-Gujarat' literature falls short on three counts: a failure to analyze EG prior to Modi, a systematic disregard for the potential (expectations) for EG in Gujarat prior to Modi, and a general reluctance to compare Gujarat's EG with noteworthy Indian states and developing economies. In the pro-Kerala literature, scholars fail to problematize the most widely employed HD indicators, and in doing so, neglect a rigorous examination of what these indicators may 'miss', regarding Kerala's HD. This has contributed to the spread of a wider, and more troubling 'academic complacency' which has manifested itself in several ways: a failure to distinguish between 'levels' and 'rates' of HD indicators, neglect of Kerala's extensive diaspora in the Middle East, and a glaring disregard for the sustainability of the 'model' going forward.

4. Methodology

The problems afflicting both literatures raise pertinent questions about whether the models are as exemplary as their proponents claim. This paper employs

distinct methodological approaches, each tailored to overcoming the aforementioned shortcomings, with the ultimate aim of providing an authoritative conclusion about the credibility of the models.

Gujarat's EG is analyzed in relation to three different measures of 'success'; a 'historical analysis' of EG before and after Modi coming to power; analysis of Gujarat's EG 'outcomes' in relation to its 'potential for EG', prior to Modi; and a 'comparative analysis' of Gujarat's EG in relation to the EG of other noteworthy Indian states, and developing economies, during the 2000s. This ternary approach offers an original and comprehensive framework for examining Gujarat's EG and adjudging whether it has been a true 'success'.

Kerala's HD achievements are examined across a range of widely referenced HD indicators. However, to overcome the superficiality of current analyses, this paper investigates further, assessing Kerala's progress through a 'levels vs. rates' analysis of key HD indicators, examining the problem of Malayali diaspora in the Middle East, and investigating the sustainability of the 'model', specifically in relation to the state's financial health. Whilst scholars have engaged with parts of the above, no current study has analyzed all elements together. This paper's methodology is entirely authentic in that regard, and provides a framework for a rigorous interrogation of Kerala's HD.

5. Empirical Analysis

This principal section presents the analysis of the two 'models' of development.

5.1 Assessing Gujarat's Economic Growth

This section analyzes Gujarat's EG through the three-part framework outlined in '4.'

5.1.1. Historical Analysis

Archetypal celebrations of 'double digit' EG under Modi, systematically neglect examination of past EG. Even if Gujarat grew faster than all-India under Modi, this does not validate the existence of a 'Modi effect' on EG. Rather, the gap between Gujarat's EG rate and the all-India EG rate should have widened in Modi's tenure compared to the previous period, to conclude that Modi and his 'Gujarat model', are worthy of the status they are so widely ascribed.

By comparing EG performance under Modi against Gujarat's own past EG record, this 'difference in differences approach' asks, if Modi's 'Gujarat model' affected significant change to EG, or simply maintained Gujarat's existing EG advantage?

Gujarat's growth rate of per capita GSDP was 0.8% greater than the national average during the 1980s, increasing to 1.2% in the 1990s (see table 1.). Although this difference increased again during the 2000s, to 1.5%, it did not increase significantly; "in other words, the 'difference-in-difference estimate of Gujarat's relative growth performance in the 2000s, compared to the 1990s, is close to zero" (Ghatak & Roy, 2014b: 15). Gujarat's EG had already outperformed

all-India during the 1980s and 1990s, and its advantage did not differentially improve in the 2000s relative to the 1990s.

This conclusion is also supported by the total GSDP data; Gujarat held an advantage over all-India since the 1980s and there is no evidence of a differential widening of this advantage at any stage, especially not during the 2000s when Modi was in power. Gujarat was already growing faster than all-India, and did not experience any *further* EG acceleration in the 2000s compared to the 1990s. This conclusion is also supported when growth rates are calculated in terms of net state domestic product (NSDP), an alternative measure of state income.

Table 1. Growth Rates of GSDP Level and per capita: Gujarat vs. India

	Total GSDP			**Per Capita GSDP**		
	1980-89	1990-99	2000-10	1980-89	1990-99	2000-10
Gujarat	6.4	7.0	8.9	3.9	4.9	7.0
All India	5.4	5.8	7.4	3.1	3.7	5.6
Difference	1.0	1.2	1.5	0.8	1.2	1.4

(Garvey (2015) taken from Centre for Monitoring Indian Economy)

Beyond Gujarat, a number of other states achieved similar attainment in total GSDP growth (see table 2.). Both Maharashtra and Tamil Nadu maintained similar differentials to Gujarat across the time period. Moreover, Haryana, whose difference with the national average had fallen to -0.5 in the 1990s, had achieved the same differential growth advantage as Gujarat by the 2000s and thus a far

higher differential acceleration. More notable still is Bihar, whose difference with the national average was -1 during the 1980s, falling to -2.5 during the 1990s, and then recovering to 0.3 during the 2000s. Under the difference-in-difference approach, Bihar's EG turnaround in the 2000s was supreme.[14] Figure 4 also evidences the aforementioned conclusions, but using per capita rather than total GSDP growth.

Table 2. Average Annual Growth Rate of GSDP Level and Per Capita: 13 Major States [15]

	Total GSDP Growth Rate			GSDP Per Capita Growth Rate		
	1980-99	**1990-99**	**2000-10**	**1980-99**	**1990-99**	**2000-10**
Bihar	4.4	3.3	7.7	2.1	0.8	5.3
Gujarat	*6.4*	*7.0*	*8.9*	*3.9*	*4.9*	*7.0*
Haryana	6.3	5.3	8.9	4.0	2.7	6.8
Himachal Pradesh	5.2	5.7	7.5	3.2	4.0	6.2
Karnataka	5.6	6.9	6.7	3.5	5.2	3.1
Kerala	3.3	5.9	7.4	2.4	4.9	6.8
Madhya Pradesh	4.3	6.3	5.4	1.9	4.0	3.4
Maharashtra	6.3	6.8	7.8	4.3	4.6	6.1
Punjab	5.7	4.5	5.8	3.3	2.5	4.3
Rajasthan	7.2	6.7	7.3	4.4	4.1	5.2
Tamil Nadu	5.5	6.4	8.0	3.4	5.2	6.5
Uttar Pradesh	5.0	4.0	5.6	2.8	1.7	3.7

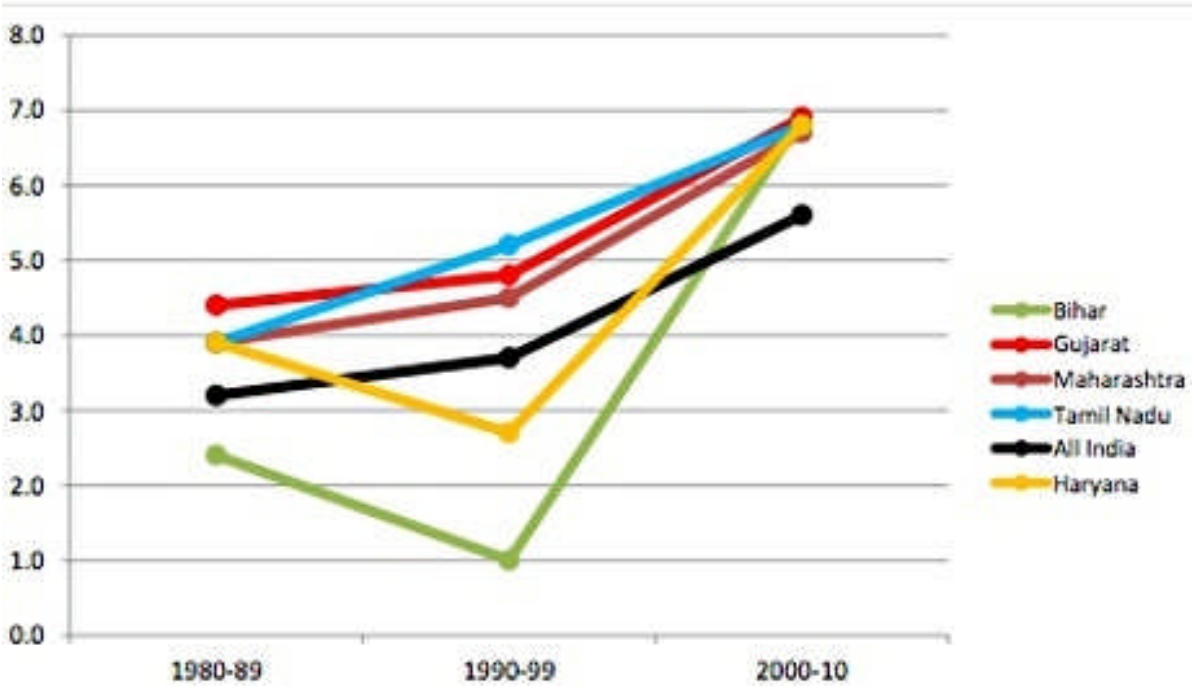
[14] Given Bihar's low-income level starting point (i.e. Bihar was a poorer state), 'convergence' theory might rationalize the exceptional EG turnaround. Irrespective, however, the central conclusion stands.

[15] Growth rates are calculated at constant prices, with base year 2004-05.

West Bengal	4.3	6.6	6.3	2.7	4.8	4.8
All India	*5.4*	*5.8*	*7.4*	*3.1*	*3.7*	*5.6*

(Garvey (2015) taken from Centre for Monitoring Indian Economy)

Figure 4: Average Annual Rate of Growth of Per Capita GSDP, by decade



(Ghatak & Roy, 2014a)

Finally, it is worth commenting on the Bhuj earthquake that struck Gujarat in January 2001, affecting a negative growth rate in the fiscal year 2000-01 (Ghatak & Roy, 2014b: 13). Exponents of the 'Gujarat model' might claim the earthquake and subsequent EG slowdown would bias the analysis against the Modi administration. However, even once the analysis is restricted "for the 2000s decade to begin from the year Modi came to power, i.e. 2001-2010, as opposed to

2000-10" (Ibid: 13), the central conclusion that there was no differential EG acceleration when Modi took office, remains robust.

5.1.2. Comparative Analysis

The fundamental claim of the 'Gujarat model' is that under Modi, Gujarat's 'double-digit' EG made it one of the fastest growing economies in the world (Hashmi, 2014). Nevertheless, limited effort has been made to actually contextualize Gujarat's EG. Crucially, where does Gujarati's EG sit in relation to EG rates of other high-performing Indian states, during the 2000s? Furthermore, how do Gujarati EG rates compare to those of other developing economies in the 2000s?

Gujarat vs. other Indian States

The claim that Gujarat achieved high rates of EG during the 2000s, is in itself, largely unequivocal. Gujarat's total GSDP grew at an annual average rate of 8.9% for the period, 2000-10, whilst per capita GSDP increased at an average of 7% per annum; the corresponding all-India figures were 7.4% and 5.6% (see table 2.).

However, Gujarat was not unique in achieving high rates of EG during the 2000s. From 2000-10 Tamil Nadu, Bihar, Himachal Pradesh, and Maharashtra all achieved average annual rates of GSDP growth in excess of 7.5%, realizing similar gains in per capita GSDP growth (table 2.). Indeed, Haryana's average annual rate of total GSDP growth of 8.9% equaled Gujarat's, and as mentioned in

5.1.1, was more impressive given the differential growth acceleration that overcame poor EG of the 1990s. Therefore, though Gujarat's EG was clearly impressive, it was not unrivalled.

A counter-argument to the aforementioned conclusion, might read as follows: 'given that Modi took office in 2001, one should allow for a period of time in which he established and began implementing his economic program. Therefore, only *after* several years, would the 'fruits of Modi's labour' become evident'. However, even after factoring in a (generous) four year period of 'acclimatization' and analyzing Gujarat's EG from 2005-06 to 2012-13, a similar story emerges. Gujarat's EG was impressive but other states also achieved similar rates of EG during the late 2000s and early 2010s, when Modi's 'Gujarat model' was supposedly in its 'prime'.

From 2005-6 to 2012-13, the Indian economy grew at an average Year on Year (YoY) rate of 7.97% (see table 3.). Internally, Gujarat, Haryana, Tamil Nadu, Maharashtra, and Bihar all recorded YoY growth rates in excess of 8.7% for the same period. And, although Gujarat's 9.75% YoY growth in GSDP was the highest of the aforementioned states, it was only marginally better than Bihar's 9.5% YoY EG.

Table 3. Growth Rate (% YoY) of GSDP at Constant 2004-05 Prices

	2005-6	2006-7	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13	2005-2013
Bihar	-1.69	16.18	5.55	14.54	5.35	15.03	10.29	10.73	9.50
Gujarat	*14.95*	*8.39*	*11.0*	*6.78*	*11.25*	*10.01*	*7.66*	*7.96*	*9.75*
Haryana	9.20	11.22	8.45	8.17	11.72	7.41	8.03	5.55	8.72
Maharashtra	13.35	13.53	11.26	2.58	9.30	11.26	4.82	6.18	9.04
Tamil Nadu	13.96	15.21	6.13	5.45	10.83	13.12	7.39	3.39	9.44
Uttarakhand	14.34	13.59	18.12	12.65	18.13	10.02	9.36	5.61	12.73
India	*9.48*	*9.57*	*9.32*	*6.72*	*8.59*	*8.91*	*6.69*	*4.47*	*7.97*

(Central Statistical Office, 2014).

Furthermore, the ostensibly impressive EG rates of the aforementioned states look modest when compared with Uttarakhand's EG. Uttarakhand achieved average YoY growth of GSDP of 12.37% during the period, achieving close to 20% EG in both 2007-08, and 2009-10.

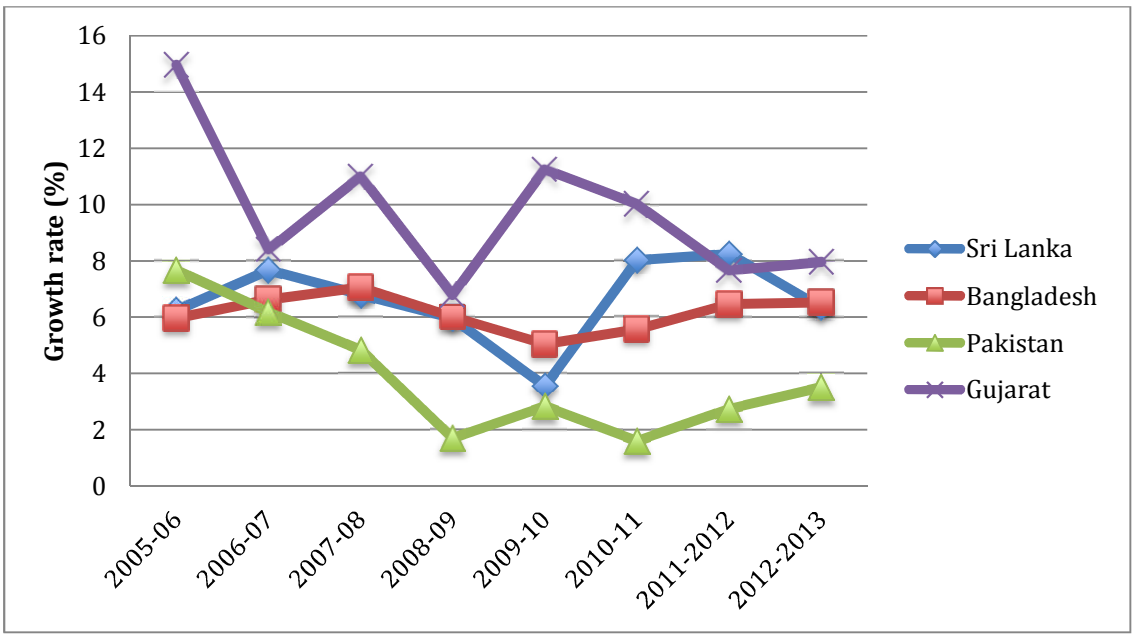
In summary, Gujarat achieved unequivocally high EG during the 2000s, growing faster than all-India and many other Indian states. However, Bihar, Maharashtra, Haryana, Tamil Nadu, and more recently Uttarakhand, all recorded comparable EG in the same period. Yet, there are no 'Maharashtrian' or 'Tamil' models of development, nor is there the same consideration afforded to Nitish Kumar for

his EG achievements in Bihar as there is to Modi. Whilst Gujarat's recent economic record is undoubtedly impressive it is by no means anomalous, and does not, therefore, "justify the wild euphoria and exuberant optimism about Modi's economic leadership" (Ghatak & Roy, 2014a).

Gujarat vs. Developing Economies

How does Gujarat's EG during the 2000s compare in the wider international context? Again, allowing Modi a period of 'acclimatization' and analyzing data from 2005-06 to 2012-13, Gujarat's EG looks impressive. Certainly early in that period, YoY growth of nearly 15% in Gujarat was more than double the growth rates recorded in other South Asian economies, as Figure 5 illustrates. Gujarat had also bounced back from the effects of the global financial crisis by 2009-10, whilst Bangladesh and Sri Lanka experienced an additional year of economic slowdown before eventually recovering.

Figure 5: Gujarat's YoY Growth (%) vs. GDP Growth Rates in South Asia (%)[16]



(World Bank, 2015)

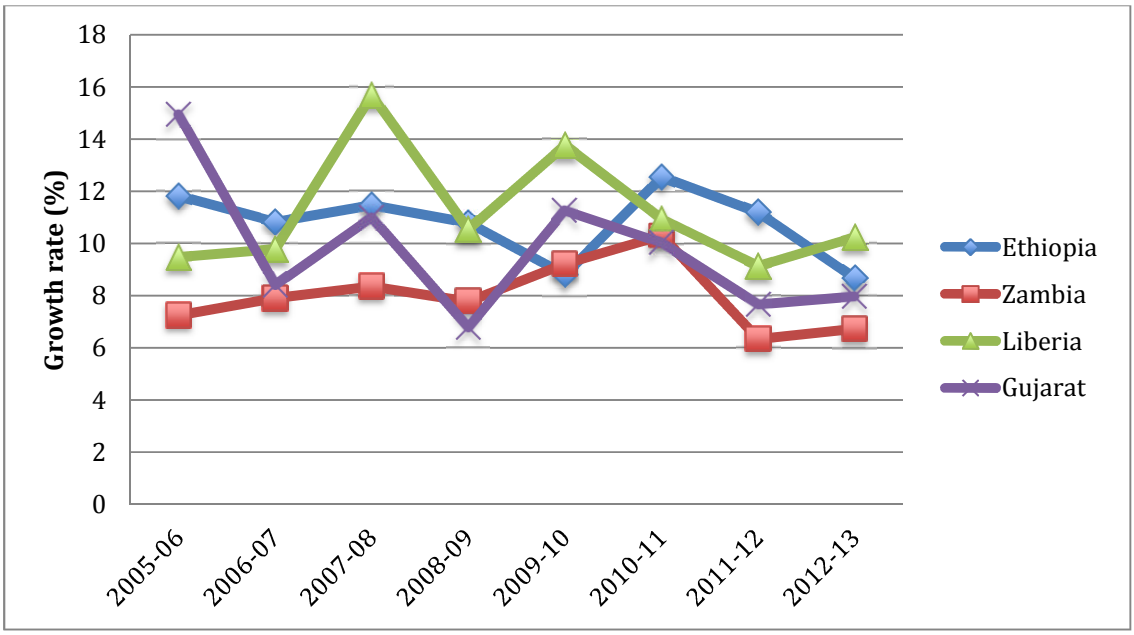
Much has been written of recent EG achievements of a number of African nations; since 2005, "Africa was among the world's fastest growing continents, buoyed in part by improved governance and economic reforms" (The Economist, 2015b). How does Gujarat compare with these high-performing African economies?

As Figure 6 highlights, Gujarat's recent EG looks modest compared to the astonishing EG recorded by Liberia from 2005-6 to 2012-13. Whilst Gujarat recorded average annual GSDP growth of 9.75% across the period, Liberia achieved 11.19% average annual growth of total GDP. Indeed, Ethiopia also outperformed Gujarat recording average annual GDP growth of 10.76%. Again

[16] GDP for nations; GSDP for Gujarat.

though, neither Liberia nor Ethiopia has received the scholarly attention and excitement that has greeted Gujarat.

Figure 6: Gujarat's YoY Growth (%) vs. GDP Growth Rates in Africa (%)[17]



(World Bank, 2015)

5.1.3. Potential vs. Outcome

This final methodology is the most nebulous, as it is unable to rely on a solely quantitative approach, like those taken in '5.1.1'. and '5.1.2'. By analyzing key determinants of EG in Gujarat prior to Modi taking office, it situates Gujarat's actual EG in the context of expectations for EG. By comparing outcomes with expectations, a judgment can be reached regarding the success of Modi's 'Gujarat model'.

[17] GDP for nations; GSDP for Gujarat.

Coastal Gujarat

Smith (1776:3) argued that "upon the sea coast and banks of navigable rivers, industry would subdivide and improve". In 2004, 17.4% of the world's landmass was located within sixty miles of ocean or navigable river, nearly 50% of the world's population lived on this land and from this land, 67.7% of global GDP was produced (Weil, 2004: 470). Prosperity in the globalized contemporary economy centres on trade.

Whereas landlocked areas face high transport costs, coastal regions can engage more competitively in trade. For example, a large part of contemporary China's EG has been driven by the success of its Eastern coastal states (see Sun, 2013).[18] Indeed, as recently as 2001, the Indian Infrastructure Report (IIR) argued, "coastal shipping was an untapped mode of transportation with vast potential" (IIR, 2001: 165).

Gujarat is a coastal state, situated on India's Western seaboard (see Figure 7). As well as proximity to the Arabian Sea, Gujarat is benefited by two inlets, the Gulf of Kutch and Gulf of Khambhat, which connect additional cities directly to the open ocean (see Figure 8).

[18] Interestingly, a recent article referenced Gujarat as, "India's Guangdong" (The Economist, 2011).

Figure 7: Map of India by State or Union Territory

(Graph Atlas, 2015)

Given there is wide consensus that "geography continues to matter for economic development" (Gallup et al, 1999: 182), it is reasonable to conclude that Gujarat's advantageous coastal location provided it with significant potential for EG, particularly when compared to less fortunate, landlocked Indian states.

Figure 8: Map of Gujarat

(Wikimedia, 2015)

Gujarat's Infrastructure

Though its relationship with EG is more complex, the "impact of infrastructure on GDP growth is (also) substantial" (Esfahani & Ramirez, 2002: 471).[19] Infrastructure expands the productive capacity of a given area of the economy. For example, a modern highway allows a truck driver to transport goods to market quickly, reducing both the costs to the producer, and wear and tear of the truck (Munnell, 1992:191). The provision of highways generates the potential for

[19] The ambiguous direction of causality means that whilst "infrastructure affects EG, EG can also shape the demand and supply of infrastructure, which is likely to cause an upward bias in estimated returns to infrastructure" (Esfahani & Ramirez, 2002: 443).

firms to produce goods at lower costs, thus increasing their competitiveness. The same is true of other fundamental facilities: ports, airports, bridges, tunnels, electrical grids, and telecommunications networks. Prior to CM Modi, what was the condition of Gujarat's infrastructure, and what corresponding EG potential was held therein?

It is telling that the 2001 IIR presents Gujarat as a case study in the field of Indian infrastructure development, praising the 1999 'Gujarat Infrastructure Development Act',[20] and lauding the state government's "very progressive approach to infrastructure" (Ibid: 11). Even prior to the 1999 Act, Gujarat had demonstrated its desire to build world-class infrastructure by revising Industrial Policy in 1995, and then establishing a State Infrastructure Development Board (Ibid: 77).

The data also supports claims that prior to Modi, Gujarat's infrastructure was exemplary relative to other states. For example, analysis of 'Traffic and Performance Indicators of Indian ports' in 1998-9, revealed that in minor and intermediate ports, Gujarat was already the "dominant player" with rising performance expected due to the ongoing construction of private ports (ibid:159). In relation to roads, the report actually highlights an overprovision in Gujarat: for example, the road linking Gandhinagar and Ahmedabad was described as one "which only politicians and bureaucrats need" (Ibid: 12).

[20] The Act engendered "a clear paradigm shift in the government, as from having been a provider the government becomes an enabler of infrastructure" (IIR, 2001: 77)

Prior to Modi, Gujarat's infrastructure was among the best in India. However, as is the case with geography, realizing the potential afforded by good infrastructure "requires institutional and organizational reforms that are more fundamental" (Esfahani & Ramirez, 2002: 471). Sound Infrastructure did not guarantee continued EG in Gujarat.

Gujarati Diaspora

A final key determinant of EG potential is a region's diaspora.[21] The main channel through which a diaspora can positively impact its homeland is known as the 'brain-gain': in essence, when a diaspora becomes successful and sends remittance income back.[22]

Given that in 2015, Gujaratis comprised 33% of the Indian diaspora worldwide (Rajghatta, 2015), they wielded enormous influence. After Pakistan, the UK holds the second largest population of Gujarati diaspora, estimated at 600,000 (NCGO, 2015). Extensive anecdotal evidence highlights the success of Gujaratis in the UK where they are regarded as a highly dynamic and entrepreneurial community, accredited with revolutionizing the retail sector through the 'corner shop revolution' (Madhvani, 2013). Beyond retail, it is estimated that there are over 40,000 Gujarati owned businesses in the UK (NCGO, 2015), with Gujaratis owning a significant portion of London's lucrative Hotel Industry.[23]

[21] Diaspora refers to people who have spread from their homeland.
[22] The significance of this effect corresponds to the size of the diaspora.
[23] Astonishingly, Gujaratis owned "over 42% of the US hospitality market in 2006, with a combined worth of $40 billion (Dholakia-Dave, 2006).

In other regions, diaspora did not hold such potential influence. Bangladeshi and Pakistani diaspora are traditionally far less successful: arriving in the UK in the 1950s, "they were generally single men, poorly educated, and with few labour skills" (Unnithan, 2012). Moreover, their potential influence with regard to improving the economic fortunes of their respective homelands is lessened.

Such a successful diaspora was clearly a significant resource for Gujarat but again, prior to Modi, was untapped. Modi's celebration of Gujarati nationalism, and explicit attempts to improve diaspora engagement - "the most active diaspora offices are now found in Gujarat" (Agunias, 2013) - allowed him to fully utilize the resource and attract investment and remittances back to Gujarat. Modi urged the diaspora to invest in modernizing Gujarat, involving themselves in the state's development "through their financial and intellectual capital" (Desai, 2014).

Conclusion

There was a significant reservoir of EG potential in Gujarat in 2000. Expectations for Gujarati EG when Modi came to power were high. Furthermore, that Gujarat was one of the fastest growing Indian states during the 2000s is not surprising, nor should it be viewed as such a dramatic success. Comparing Gujarat under Modi, to Bihar under Kumar, the latter had none of the aforementioned advantages, yet still recorded an astonishing EG turnaround ('5.1.1.') that was

sustained throughout the 2000s ('5.1.2.').[24] By comparing expectations with outcome, Bihar is markedly more successful than Gujarat.

Though foundations for strong EG were present in Gujarat, continued high EG was not assured; potential is not a 'necessary *and* sufficient' condition for positive EG outcomes. Certainly, credit should be afforded to Modi for utilizing the factors efficiently.

5.1.4. Conclusion

This section has analyzed Gujarat's EG, concluding that there was no differential growth acceleration under Modi; that Gujarat's strong EG rates during the 2000s were replicated in other Indian states and developing economies; and that strong EG should be seen in the context of Gujarat's strong foundations for EG prior to Modi taking office.

5.2 Assessing Kerala's Human Development

I analyze Kerala's HD using the framework outlined in '4.'

5.2.1. Unequivocally high HD

Economic achievement is relatively straightforward to quantify; it is measured by examining growth.[25] HD, however, is a more nebulous idea. A variety of

[24] Even in 2011, Bihar ranked 15th on the Infrastructure Development Index of 16 major Indian states (Patra & Acharya, 2011: 25).

indicators act as proxies for different aspects of HD. This section compares Kerala's achievements across a number of indicators with other Indian states and South Asian nations, to test the claim that its HD is indeed exemplary.

Table 4. presents Kerala's HD attainment in 2011 against a number of noteworthy states. Compared with these states, Kerala's HD in 2011 is outstanding. Poverty estimates and IMRs are lowest in Kerala, whilst life expectancy, literacy rates, and sex ratio, are the highest, by some distance.

Table 4: HD Indicators across Indian States, for 2011

	Bihar	**Gujarat**	**Haryana**	**Kerala**	**Maharashtra**	**Tamil Nadu**
Poverty Estimates[26] (%)	53.5	23	20.1	12	24.5	17.1
Life Expectancy at birth[27]	65.9	67.8	68.3	74.2	69.9	69.0
Infant Mortality Rate (per 1000 live births)	44	41	44	12	25	22
Total Fertility Rate (births per woman)	3.6	2.4	2.3	1.8	1.8	1.7
Sex Ratio (females per 1000 males)	916	918	877	1084	925	995
Literacy Rate, age 7 years and above (%)	63.4	79	76.1	94	82.7	80.4

[25] Although there exist a variety of income measures, they all seek to quantity growth in some way.
[26] Headcount Ratio (2009-10)

(Sources: **Poverty:** GOI (2012b) p.29; **Life Expectancy:** GOI (2012e); **IMR:** GOI (2012c) Table 1.; **TFR:** GOI (2012d); **Sex Ratio:** GOI (2011), p88.; **Literacy Rate:** GOI (2011) p106.)

Table 5. presents Kerala in an international comparison, where its HD is equally impressive, beating all-India, Pakistan, and Bangladesh on each of the key HD indicators listed. Furthermore, despite significantly lower per capita income, Kerala also rivals China, and remarkably, South Korea, on a number of the indicators.

Table 5: Per Capita GDP & HD Indicators in Kerala, India, and Selected Countries, 2011

	Kerala	India	Bangladesh	Pakistan	Sri Lanka	China	S.Korea
Per capita GDP[28]	1,059	838	588	672	1,402	2,640	16,684
Life expectancy at birth (years)	75	65	69	65	75	73	81
Infant mortality rate (per 1000 live births)	12	47	37	59	11	13	4
Total Fertility Rate	1.8	2.6	2.2	3.4	2.3	1.6	1.2
Mean years of schooling (age	6.19[29]	4.4	4.8	4.9	9.3	7.5	11.6

[28] At $US 2000 Prices.
[29] Taken from NSS data (GOI, 2006).

15+)							
Female-Male Ratio in population[30]	1,084	937	976	968	1,027	926	1,006
Proportion of population below poverty line[31]	7.05[32]	68.7	76.5	60.2	29.1	29.8	n/a

(Sources: **Country data**: World Development Indicators, 2012a. **Kerala**: GOI (2012a) unless otherwise stated)

Drèze & Sen (2002: 97) argue, the significance of Kerala's achievements are often underestimated: "Kerala, not being an independent country, is often missed in policy analyses based on international comparisons". Yet in 2014, Kerala's population was 33.9 million, greater than Saudi Arabia (28million), Sri Lanka (20million) and Australia (23million).[33] To achieve such high levels of HD for such vast numbers of people is indisputably commendable.

Having highlighted Kerala's undisputable success, most analyses of Kerala conclude. However, given that Kerala's development experience is widely ascribed 'model' status, such systematically superficial analysis is deeply

[30] Females per 1000 males.
[31] Poverty line of PPP $2/day
[32] Kerala's poverty is measured using state specific poverty lines (see, GOI, 2013).
[33] Kerala data from (Population of India, 2014); countries from (World Bank, 2014).

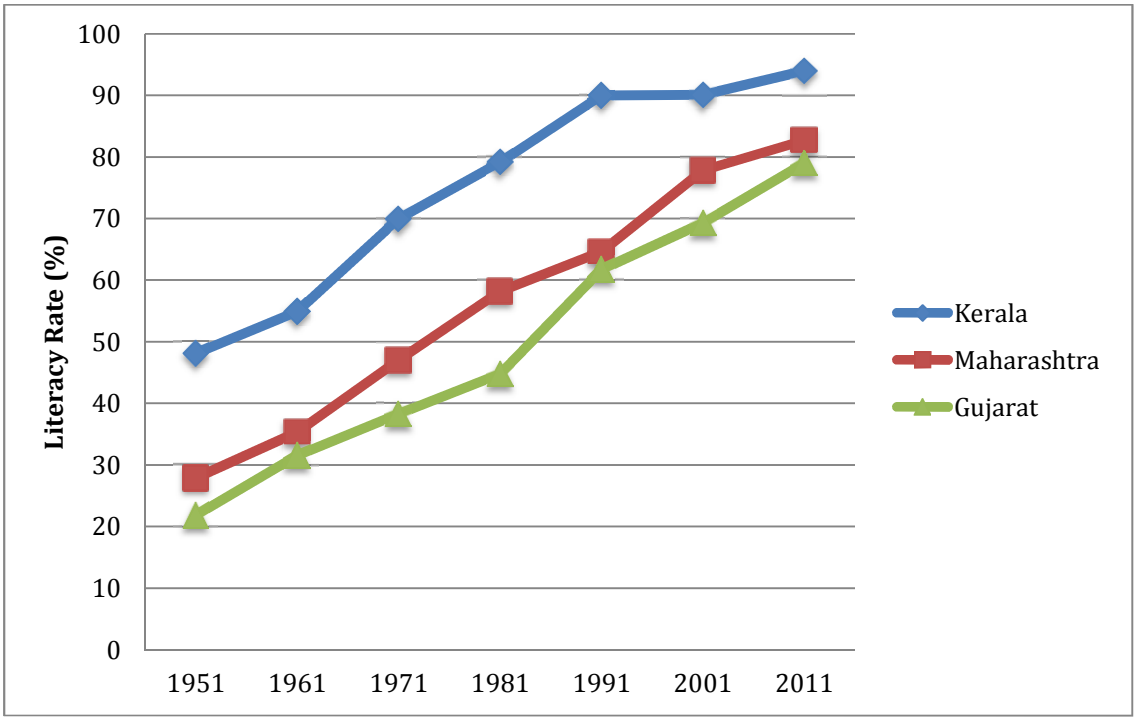
unsatisfactory. Therefore, this study investigates further, interrogating aspects of Kerala's HD that stereotypical analyses appear to miss.

5.2.2. Levels/Rates of Change

That Kerala has the best all-round HD in India is unambiguous, as the state has the highest *level* of HD indicators as shown in '5.2.1'. However, the current literature neglects analysis of Kerala's HD in terms of *rates* of change. Particularly in the Indian context analysis of rates is vital as it reveals progress of HD. Furthermore, given proponents argue in favour of a "clearly identifiable Kerala model" (Bhagwati & Panagariya, 2012: 87) worthy of emulation by other Indian states, rates are of huge significance as they offer an indication of the speed with which disappointing HD can be overcome. The need for many Indian states to improve HD is pressing, but does Kerala serve as a 'model' that can cater to this urgency?

Subjecting literacy to a 'rate of change' analysis, how does Kerala fare? Figure 9 charts the progress of literacy across several prominent Indian states. In 2011, Kerala still had the highest literacy but its 20 percentage-point 'lead' over Maharashtra in 1951, had reduced to 11-percentage points; similarly, a 25 percentage-point gap over Gujarat was only 15 percent in 2011. Far from storming ahead in literacy, Kerala began with a significant historical advantage at independence, an advantage that has since narrowed; Kerala's progress in literacy looks typical, if a little leisurely.

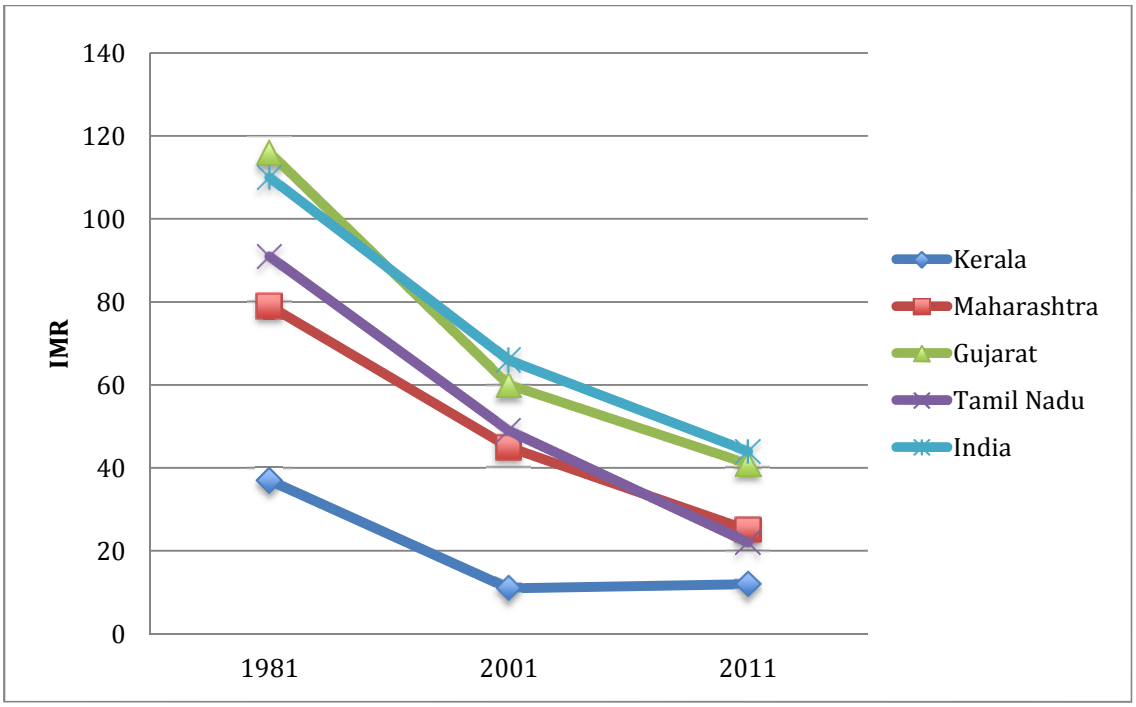
Figure 9: Literacy Rates in Kerala, Gujarat & Maharashtra, 1951-2011



(GOI, 2011)

Examining the progress of IMRs, a similar story emerges. As Figure 10 illustrates, Kerala began with significantly lower IMRs than all-India and this advantage has gradually diminished. This observation is also true of progress in life expectancy (Bhagwati & Panagariya, 2012:89). Barring a significant historical advantage, Kerala's recent progress has been distinctly unspectacular.

Figure 10: Infant Mortality Rates, 1981-2011



(SRS Bulletin, 2013)

Proponents of the Kerala 'model' counter the aforementioned critique claiming that progress becomes more difficult at higher levels of attainment. For example, they claim, it is harder to improve literacy from 70 to 80 percent than from 30 to 40 percent. Bhagwati & Panagariya (2012:91) suggest this is unconvincing because although the scope for improvement reduces as achievement levels rise (e.g. as rates move closer to 100), this need not imply slower progress on the margin. They argue that with literacy, there are good reasons to believe progress will become easier as achievement rises; social pressure on parents to impart literacy to their children increases if more children in their neighborhood are literate; governments are pressurized to ensure people are not left behind, as literacy rises. Conversely at lower literacy levels, it is harder to find teachers among the few literate, whose skills are highly sought in other professions (ibid).

However, this reasoning does not apply to all HD indicators. Progress in health is easier at lower levels where low cost interventions (vaccinations and basic sanitation) can affect significant gains. As health indicators rise, disproportionately greater expertise and investment are required to ensure continued progress. Moreover, in certain indicators, Kerala has already reached the 'pinnacle' of development. For example, Kerala's 2011 TFR of 1.8 was lower than the UK rate, and given that fertility decline is presumed to stabilize around 2.2, Kerala is unlikely to lower its TFR further; gradual convergence with other Indian states, is expected.

Irrespective of the underlying factors that drive HD improvement, Kerala's HD progress since independence has generally been unspectacular and to a degree, Kerala has been living off past HD gains. Surely, therefore, of greater interest are the reasons for Kerala acquiring such a significant lead at independence. What drove Kerala's HD so far ahead of the rest of India? This after all, and not Kerala's unequivocally high HD of today, is the significant achievement.

5.2.3. Malayali Diaspora

Recent criticism of the Kerala 'model' has congregated around the issue of uneven distribution of HD. Raman (2010) argues that power relations in Kerala are still plagued by inequalities. Kabir (2010) claims the 'model' has bypassed Malayali Muslims, who sit on the periphery of HD success. And, some critics suggest the 'model' has ignored the gender dimension as violence against women

and institutionalized dowry payments both remain prevalent (Saradamoni, 1994).

Although this focus on the coverage of HD has exposed 'pockets' of relative backwardness in Kerala, that small 'pockets' exist in a state of over 30 million people, is unfortunately, unsurprising. Moreover, to suggest that these 'pockets' in some way belittle Kerala's broader HD attainment is unpersuasive. Far more troubling for the 'model' is a critique that focuses on HD beyond Kerala's borders; poor HD experienced by Malayali diaspora in the Arabian Gulf.

Of the 6.5 million Indian migrants in the Gulf in 2013, over half were Malayali, the largest population of Malayalis outside of Kerala (The Hindu, 2013). Remittances received in Kerala from diaspora in the Gulf in 2010, accounted for nearly a third of Kerala's NSDP (Rajan & Zachariah, 2010). Though economically problematic (explored in '5.2.4.'), that Kerala's development has relied so heavily on remittances earned under oppressive Gulf regimes is also troubling from an HD perspective.

A central concern relates to the *Kafala* system, used by Gulf States to monitor migrant labour. The system requires migrant workers to secure sponsorship from a local, or *kafeel,* on entering the Gulf*. Kafeel's* charge up to $2,500 for this sponsorship leaving poor migrants with crippling debt that ties them to their *kafeel*; evidence suggests that if workers are unable to service their debts, they can have wages withheld and passports removed (Batty, 2014). The International Trade Union Confederation General Secretary, described the

system as “modern day slavery” where workers are owned by employers, lack basic workers’ rights, and are unable to leave jobs despite appalling working and living conditions (Burrow, quoted in Batty, 2014).

Recent media attention on Qatar’s Football World Cup preparations has further highlighted the human rights abuses that migrant labourers in the Gulf regularly suffer. According to Qatar’s own figures, 882 migrant workers from India and Nepal died in the country between 2012 and 2013, with Malayalis a significant proportion of this total. Furthermore, the authoritarian nature of Gulf regimes means that criticism of the state is not tolerated and thus the situation for migrant workers is unlikely to improve.

That Kerala’s development has been supported by the remittance incomes of Malayali workers in the Gulf, where HD is infamously poor, is troubling for the ‘model’ and its claims of ubiquitous HD success.

5.2.4. Sustainability of the Model

A widely referenced concern relates to claims of Kerala’s poor EG undermining the sustainability of high HD attainment. For example, Kurian (1999:345) argues, “the main constraint for sustainability of high social development originates from low per capita income and slow growth”. Such arguments stress the need for the state government to urgently identify strategies that ensure the EG acceleration necessary to maintain high-quality social service provision.

However, this concern lacks empirical grounding. Using GSDP data converted to common 2004-05 prices, Chakraborty et al. (2011) show that Kerala has consistently ranked in the top five states in terms of per capita GSDP since 1981. Therefore, Kerala's EG in 'level' terms, is not cause for concern. Moreover, analysis of 'rates' of Kerala's EG also eases concerns. As table 6. highlights, Kerala's GSDP grew at a higher rate than all-India in each year from 2004-5 to 2010-11. On the face of it, Kerala's EG shows no indication of undermining the sustainability of the state's HD achievements. However, in keeping with the theme of this paper, interrogating beyond the 'numbers' raises pertinent concerns about Kerala's economic health.

Table 6. GSDP Growth (%YoY) at Constant 2004-05 Prices: Kerala vs. All-India

	2004-5	**2005-6**	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**	**2004-2011**
Kerala	10.9	7.9	8.77	5.56	9.17	6.92	7.96	8.17
All-India	6.29	7.79	7.76	4.90	8.03	5.78	4.72	6.47
Difference	4.61	0.11	1.01	0.66	1.14	1.14	3.24	1.7

(Central Statistical Office, 2014).

Though problematic from an HD perspective (as '5.2.3.' argues), it is Kerala's heavy reliance on remittance incomes that raise the most critical question about the state's financial health and sustainability of HD attainment.

Migration to the Gulf, and consequent flow of remittances, has affected "unprecedented economic change in Kerala" (Prakash, 1999: 147); Harvard economist Gita Gopinath (quoted in Deccan Chronicle, 2012) referred to Kerala's high remittance rate as both "boon and bane". High migration has contributed to a reduction in state unemployment, whilst increasing incentives to acquire skills. Remittance incomes have driven up household savings and incomes, reducing poverty among traditionally poor, migrant-households (Ibid).

However, the very fact that migration has had such a significant impact on Kerala since the mid-1970s is worrying, as it highlights the vulnerability of Kerala's economy to the Gulf's economic and political environment. To a significant degree, Kerala's economic destiny is beyond its control. The First Gulf war, for example, created a 'dual problem' for Kerala, reducing remittance incomes that had supported the state economy, and adding burden to the state's extensive welfare bill as migrants returned home (Bose et al., 2010). Similarly in 1997, the return of 30,000 Malayali migrant workers from Saudi Arabia to Kerala after the Asian financial crisis, exacerbated the recession in the state economy, as trade and commerce activity stalled, and real estate prices halved (Prakash, 1999: 145). With mounting speculation over the legitimacy of Qatar's World Cup bid, particularly since the resignation of FIFA President Sepp Blatter, the consequences for Kerala of a venue change could be disastrous.

The reliance on remittances also exposes Kerala's economy to volatility in oil prices and on foreign exchange markets. For example, when oil prices plummeted in the midst of the 2008 global financial crisis, the abandonment of

oil-related infrastructural projects in the Gulf forced many Malayali migrant workers back to Kerala, raising the 'dual' problem again. Furthermore, as migrant incomes are earned in the currency of Gulf states, their value directly depends on foreign exchange rates with the Indian rupee. In 2013, this effect was illustrated in a positive light - whilst India reeled under the pressure of a weak rupee, Malayali migrants were sending incomes home to take advantage of the arbitrage opportunity (Hindustan Times, 2013). However, this effect could feasibly work the other way, with a strong rupee reducing the real value of remittances, on which the state government is so reliant for income.

In short, Kerala's economic prosperity is heavily dependent on factors beyond its control, specifically, the economic fortunes of Malayali diaspora in the Gulf.

5.2.5. Conclusion

This section has shown that Kerala's HD successes are unequivocal – Kerala has the best HD indicators in India. However, Kerala's HD progress since independence has been unspectacular, and the large migrant Malayali population in the Gulf are highly problematic for the 'model', both from an HD and an economic perspective.

6. Implications

In relation to the two basic enquiries, this paper has found that:

1. *Gujarat's EG is not as impressive as widely perceived.*
2. *Kerala's HD is unequivocally high.*

Crucially though, how do these findings influence conventional understandings of both states as 'models of development'?

Prior to Modi's tenure as CM, Gujarat was already growing quickly and held significant potential for further EG. Moreover, EG rates under Modi were not unparalleled within or beyond India. 'Modi's Gujarat' simply does not justify the euphoria that has greeted it.

The fixation with Gujarat has undoubtedly inhibited scholarly investigation of other noteworthy states. As alluded to in '5.1.' and '5.2.', Tamil Nadu has recorded impressive recent development, rivaling Gujarat's EG rates and also closing the gap with Kerala in HD terms. Tamil Nadu offers a more balanced developmental progression, and arguably a more appropriate 'model' for national scale-up. Given the complementarity of EG and HD (as discussed in '2.1'), a 'model' that caters equitably to both is highly desirable.

The EG potential Gujarat held in 2000, is also problematic for its 'model status'. An advantageous coastal location and a successful diaspora are simply not factors that can be emulated by less fortunate states. For regions without the high EG potential that was available to Modi, 'Kumar's Bihar' where recent EG has outperformed Gujarat, would offer a more suitable 'model' of development.

That said, sustaining high EG in Gujarat was not automatic. Arguably, all-India in 1950 had vast potential for EG but the leadership was unable to convert this into successful outcomes (McCartney, 2014); other countries have also failed to transfer potential to positive EG outcomes, for example, in succumbing to the 'natural resource curse'. Gujarat needed a leader to utilize its various advantages. One who could appeal to its successful diaspora, win consecutive elections and deliver policy effectively. It needed a leader to reorganize and dominate their party, creating a political machine where corruption became "transparent and predictable" (Sinha, 2005:229) and did not, therefore, deter investment.

Although this paper has argued that Gujarat's EG under Modi was not as impressive as is widely perceived, Modi's tenure might be interpreted as a blueprint for translating EG potential to tangible outcomes, which as the history of world development demonstrates, is more challenging than many perceive; a 'model of governance', rather than a 'model of development'.

Kerala's HD is unequivocally the best in India. This, and Kerala's contribution to a paradigm shift in development thinking that saw HD replace EG as the ultimate gauge of human progress, are highly commendable.

However, Kerala's HD was exceptional at independence and has progressed slowly since. The orthodox literature should, therefore, re-evaluate its approach to the study of Kerala, turning away from Kerala's current HD attainment, and towards investigation of the key factors behind Kerala's significant historical

advantage in HD. Though "horizontal mobilization across broad sections of Malayali society" is the most widely cited factor (Heller, 1996), others include, "interactions with foreigners in trade, the presence of benevolent Maharajas, Christian missionaries, and a strong communist movement" (Ramanathaiyer & MacPherson, 2000: 185-6).

If these factors could be emulated by other states then perhaps there is credence to the idea of 'Kerala model'. However, to the extent that horizontal mobilization is an organic process that must come from within a given society, and the other factors are historical and geographic aberrations, I question the replicability of a 'Kerala model'.

At its heart though, this paper has questioned whether the 'Kerala model' is even desirable in itself, given its heavy economic reliance on the Malayali diaspora working in a 'low-HD' region. Irrespective of replicability, this paper has shown that beyond the 'numbers', Kerala's developmental progression is tainted, and its sustainability (certainly economically) is doubtful.

Bibliography

Agunias, D.R. (2013) 'How to improve diaspora engagement', *The Guardian Online,* February 20th. Accessed 24/5/15: http://www.theguardian.com/global-development-professionals-network/2013/feb/20/improving-asian-diaspora-insitutions.

Bagchi, A.K., Das, P. & Chattopadhyay, S.K. (2005) 'Growth and Structural Change in the Economy of Gujarat', *Economic and Political Weekly,* Vol.-XL, No.28, July.

Batty, D. (2014) 'UN investigates claims of gulf state abuse of migrant workers', *The Guardian Online,* November 29th. Accessed 29/5/15: http://www.theguardian.com/world/2014/nov/29/un-investigation-claims-human-rights-abuse-migrant-workers-uae.

Besley, T. & Burgess R. (2002) 'Can Labour Market Hinder Economic Performance? Evidence from India', *STICERD Working Paper,* No.33.

Bhagwati, J. (1996) *Political Economy and International Economics.* Boston: MIT Press.

Bhagwati, J. (2015) 'No one is above the law', *The Hindu,* March 10th. Accessed 10/3/15: http://www.thehindu.com/opinion/op-ed/no-one-is-above-the-law/article6975359.ece.

Bhagwati, J. & Panagariya, A. (2012) *India's Tryst with Destiny.* New Delhi: Harper Collins.

Bharatiya Janata Party (2014) 'Modi's Gujarat Model. The Vision India Awaits', *BJP Official Website,* May. Accessed 18/5/15: http://www.bjp.org/images/pdf_2014/the_gujarat_model.pdf.

Biswas, S. (2012) 'Gujarat is a red hot economy', *BBC News Online,* May 2nd. Accessed 20/5/15: http://www.bbc.co.uk/news/world-asia-india-17919364.

Bose, P.S., Chacko, E., Morgan, S. & Shekhar, S. (2010) 'Migration case study: is labor migration changing the landscape of Kerala?' in Solem, M., Klein, P., Muñiz-Solari, O. & Ray, W. (eds.) *AAG Center for Global Geography Education.* Accessed 1/6/15: http://cgge.aag.org/Migration1e/CaseStudy5_Bangalore_Aug12/CaseStudy5_Bangalore_Aug12.html#introduction.

Central Statistical Office (2014) 'Gross State Domestic Product at Constant 2004-05 Prices (in Rs. Crore) and Growth (% YoY),' October 31st. Accessed 25/5/15: http://planningcommission.nic.in/data/datatable/data_2312/DatabookDec2014%2059.pdf.

Chakraborty, P., Mundle, S., Panagariya, A. & Rao, G. (2011) *Economic Policies and outcomes in the Largest Fifteen States in India*. New Delhi: National Institute of Public Finance and Policy.

Chan, S. P. (2015) 'India to overtake China as fastest growing large economy, says IMF', *The Telegraph Online,* March 16th. Accessed 12/5/15: http://www.telegraph.co.uk/finance/globalbusiness/11474914/India-to-overtake-China-as-fastest-growing-large-economy-says-IMF.html.

Chaudhury, N., Hammer, J., Kremmer, M., Muralidharan, K. & Rogers, F.H. (2006) 'Missing in Action: Teacher and Health Worker Absence in Developing Countries', *The Journal of Economic Perspectives,* Vol. 20, Number 1, Winter. pp.91-116.

Debroy, B. (2012) 'Gujarat: The Growth Story ', *Indicus White Paper Series,* October.

Deccan Chronicle, (2012) 'High Remittances boon and bane: Gita Gopinath', *Deccan Chronicle Online,* September 13th. Accessed 1/6/15:

http://scholar.harvard.edu/files/gopinath/files/09-13-2012_deccan_chronicle_high_remittances_boon_and_bane.pdf.

Desai, R.D. (2014) 'Modi's NRI, NRI's Modi', *The Indian Express Online,* December 2nd. Accessed 2/6//15: http://indianexpress.com/article/opinion/columns/modis-nri-nris-modi/

Dholakia, R. (2009) 'Regional Sources of Growth Acceleration in India', *IIMA Working Paper,* No. 2009-03-06.

Dholakia-Dave, H. (2006) '42% of US hotel business is Gujarati', *Times of India,* October 18th. Accessed 26/5/15: http://timesofindia.indiatimes.com/world/us/42-of-US-hotel-business-is-Gujarati/articleshow/2191584.cms.

Dixit, A. (2014) 'A Balanced Critique of the Gujarat Growth Model', *Economic and Political Weekly,* Vol. XLIX, No.39, pp.30-33.

Donaldson, J. A. (2008) 'Growth is good for whom, when, how? Economic Growth and Poverty Reduction in Exceptional Cases', *World Development,* 36:11. pp.2127-2143.

Drèze, J. & Deaton, A. (2009) 'Food and Nutrition in India: Facts and Interpretations', *Economic and Political Weekly,* Vol. XLIV, No.7.

Drèze, J. & Sen, A. (1995) *India: Economic Development and Social Opportunity.* New Delhi: Oxford University Press.

Drèze, J. & Sen, A. (1997) *Indian Development: Selected Regional Perspectives.* New Delhi: Oxford University Press.

Drèze, J. & Sen, A. (2002) *India: Development and Participation.* New Delhi: Oxford University Press.

Drèze, J. & Sen, A. (2013) *An Uncertain Glory: India and its Contradictions.* New Delhi: Penguin Books.

Easterly, W (2003) 'The Political Economy of Growth without Development: A Case Study of Pakistan', in Rodrik, D. (eds.), *In Search of Prosperity.* Princeton: Princeton University Press. pp.439-470.

Esfahani, H.S. & Ramirez, M.T. (2003) 'Institutions, infrastructure and economic growth', *Journal of Development Economics,* 70. pp. 443-477.

Franke, R.W. & Chasin, B.H. (1989) *Kerala: Radical Reform as Development in an Indian State.* San Francisco: Institute for Food and Development Policy.

Gallup, J.L., Sachs, J.D. & Mellinger, A.D. (1999) 'Geography and Economic Development', *International Regional Science Review,* 22, 2. pp. 179-232.

Garvey, T.J. (2015) 'Reassessing the development experiences of Gujarat and Kerala', *Dissertation for MSc in Contemporary India,* Oxford University, June. (Unpublished)

Ghatak, M. & Roy, S. (2014a) 'Modinomics: do Narendra Modi's economic claims add up?', *The Guardian Online,* March 13th. Accessed 18/5/15: http://www.theguardian.com/commentisfree/2014/mar/13/modinomics-narendra-modi-india-bjp.

Ghatak, M. & Roy, S. (2014b) 'Did Gujarat's Growth Rate Accelerate under Modi?' *Economic and Political Weekly,* Vol. XLIX, No.15, April. pp. 12-15.

Government of India, (2006) 'Status of Education and Vocational Training in India 2004-05', Report 517 (61/10/3), New Delhi: National Sample Survey Organization, Ministry of Statistics and Programme Implementation.

Government of India (2011) 'Provisional Population Tables', Census of India 2011, Series 1 (India), Paper 1 of 2011. New Delhi: Office of the Registrar General.

Government of India, (2012a) 'Sample Registration Bulletin October 2012', New Delhi: Office of the Registrar General.

Government of India (2012b) 'Press Note on Poverty Estimates, 2009-10'. New Delhi: Planning Commission.

Government of India (2012c) 'Sample Registration Bulletin October 2012. New Delhi: Office of the Registrar General.

Government of India (2012d) 'SRS-based Abridged Life Tables 2003-07 to 2006-10', New Delhi: Office of the Registrar General.

Government of India (2012e) 'Sample Registration System Statistical Report 2011'. New Delhi: Office of the Registrar General.

Government of India, (2013) 'Poverty Estimates for 2011-12', *Planning Commission,* New Delhi, July 22nd. Accessed 25/5/15: http://planningcommission.nic.in/news/pre_pov2307.pdf.

Graph Atlas (2015) 'Map of India by State or Union Territory'. Accessed 26/5/15: http://www.graphatlas.com/india_2.php.

Hart, C. (2010) *Doing a Literature Review: Releasing the Social Science Research Imagination.* Oxford: Sage Publications.

Hashmi, S. (2014) 'Can India's economy model itself on Gujarat?', *BBC News Online,* May 5th. Accessed 23/5/15: http://www.bbc.co.uk/news/business-27257790.

Heller, P. (1996) 'Social Capital as a Product of Class Mobilization and State Intervention: Industrial Workers in Kerala, India'. *World Development,* Vol.24, No. 6. pp. 1055-1071.

Herring, J.R. (1983) *Land to the Tiller: The Political Economy of Agrarian Reform in South Asia,* New Haven: Yale University Press.

Herring, J.R. (1989) 'Dilemmas of Agrarian Communism', *Third World Quarterly,* 11 (1). pp.89-115.

Hindustan Times (2013) 'Weak rupee a boon as remittance inflows to Kerala top Rs 75,000 crore', *Hindustan Times Online,* September 16th. Accessed 1/6/15: http://www.hindustantimes.com/business-news/weak-rupee-a-boon-as-remittance-inflows-to-kerala-top-rs-75-000-crore/article1-1122433.aspx

Hirway, I., Shah, A. & Shah, G. (2014) *Growth or Development: Which Way is Gujarat Going?* New Delhi: Oxford University Press.

Ianchovichina, E. & Lundstrum, S (2009) 'What is Inclusive Growth?', *World Bank International Department,* February 15th. Accessed 14/5/15: http://siteresources.worldbank.org/INTDEBTDEPT/Resources/468980-1218567884549/WhatIsInclusiveGrowth20081230.pdf.

India Infrastructure Report (2001) 'Issues in Regulation and Market Structure', New Delhi: Oxford University Press.

Jeffrey, R (1992) *Politics, Women, and Well-being. How Kerala became 'A Model'.* London: The MacMillan Press.

Kabir, M. (2010) 'On the Periphery: Muslims and the Kerala Model', in Raman, R. (eds.) *Development, democracy and the state: critiquing the Kerala model of development.* London: Routledge. pp.87-101.

Kalaiyarasan, A. (2014) 'A Comparison of Developmental Outcomes in Gujarat and Tamil Nadu', *Economic and Political Weekly,* Vol. XLIX, No.15, April 12th. pp. 55-63.

Kannan, K.P. (1995) 'Public Intervention and Poverty Alleviation: A study of the Declining Incidence of Rural Poverty in Kerala, India', *Development and Change,* Vol. 26 (4).

Kapur, A. (2010) 'Understanding the Puzzling Nature of Poverty'. *The New York Times.* November 18th. Accessed 19/3/15: http://www.nytimes.com/2010/11/19/world/asia/19iht-letter.html?_r=0.

Kumar, R., Kumar S, & Mitra, A. (2009) 'Social And Economic Inequalities: Contemporary Significance of Caste in India', *Economic and Political Weekly,* December 12th. pp.55-63.

Kurian, N.J. (1999) 'The Financial Crisis: An Analysis', in Prakash, B.A. (eds.) *Kerala's Economic Development: Issues and Problems,* New Delhi: Sage Publications. pp.327-346.

Kurien, J. (1995) 'The Kerala Model: its central tendency and the outlier'. *Social Scientist,* Vol. 23, No. 1/3, pp.70-90.

Lucas, R. (1998) 'On the Mechanics of Economic Development', *Journal of Monetary Economics,* 22, pp.3-42.

MacPherson, S. & Lau, K. (1996) 'Measuring Economic and Social Development: Statistical Data on the Pearl River Delta in Delhi' in MacPherson & Cheng, J.Y.S. (eds.), *Economic and Social Development in South China.* Aldershot: Edward Elgar.

Madhvani, M. (2013) 'How Gujaratis changed corner shop business in UK', *The Economic Times,* January 8th. Accessed 25/5/15:

http://blogs.economictimes.indiatimes.com/LettersfromLondon/how-gujaratis-changed-corner-shop-biz-in-uk/

McCartney, M. (2014) 'The Political Economy of Industrial Stagnation', *Lecture given as part of the MSc in Contemporary India Course*, Area Studies, Bevington Road, Oxford, October 28th.

McCartney, M. (2015) 'What is human development and how is it measured?', *Lecture given as part of the MSc in Contemporary India Course*, Area Studies, Bevington Road, Oxford, February 2nd.

Modi, N. (2014) 'The Gujarat Model', *Narendra Modi Official Website,* April 14th. Accessed 18/5/14: http://www.narendramodi.in/the-gujarat-model

Morris, S. (2014) 'A Comparative Analysis of Gujarat's Economic Growth', in Hirway, I. Shah, A, & Shah, G. (eds.) *Growth or Development? Which way is Gujarat going?* New Delhi: Oxford University Press. pp. 20-81.

Munnell, A.H. (1992) 'Policy Watch: Infrastructure Investment and Economic Growth', *The Journal of Economic Perspectives,* Vol.6. No.4, Autumn. pp. 189-198.

Nagaraj, R. & Pandey, S. (2013) 'Have Gujarat and Bihar Outperformed the rest of India?,' *Economic and Political Weekly,* Vol. XLVIII, No.47, November.

National Congress of Gujarati Organisations (NCGO) (2015) 'Gujaratis in Britain: Profile of a Dynamic Community'. Accessed 23/5/15: http://ukncgo.org/gujaratis_britain.html.

OECD (2014) 'How does India compare?' *OECD Health Statistics 2014.* Accessed 20/5/15: http://www.oecd.org/els/health-systems/Briefing-Note-INDIA-2014.pdf.

Panagariya, A. (2012) 'The Gujarat Miracle: There is no denying the major economic advances the state has made under Narendra Modi', *Times of India,* September 22nd. Accessed 11/3/15: http://timesofindia.indiatimes.com/The-Gujarat-miracle-There-is-no-denying-the-major-economic-advances-the-state-has-made-under-Narendra-Modi/

Parayil, G. (2000) *Kerala: the Development Experience. Reflections on Sustainability and Replicability.* London: Zed Books.

Patra, A.K. & Acharya, A. (2011) 'Regional Disparity, Infrastructure Development and Economic Growth: An Inter State Analysis', *Research and Practice in Social Sciences,* Vol.6, No.2, February. pp.17-30.

Planning Commission, GOI (2007) *Eleventh Five-Year Plan 2007-12.* New Delhi: Sage Publications. Accessed online 9/3/15: http://planningcommission.nic.in/plans/planrel/fiveyr.

Planning Commission, GOI (2012) *Twelfth Five-Year Plan 2012-17.* New Delhi: Sage Publications. Accessed online 9/3/15: http://planningcommission.nic.in/plans/planrel/fiveyr.

Population of India (2014) 'Population of Kerala', *Indian Online Pages,* Accessed 1/5/15: http://www.indiaonlinepages.com/population/kerala-population.html.

Prakash, B.A. (1999) 'The Economic Impact of Migration To the Gulf', in Prakash, B.A. (eds.) *Kerala's Economic Development.* New Delhi: Sage Publications. pp.134-149.

Pritchett, L. (2009) 'Is India a Flailing state? Detours on the Four Lane Highways to Modernization', *HKS Faculty Research Working Paper Series,* RWP09-013, JFK School of Government, Harvard University.

Rajan, S.I. & Zachariah, K.C. (2010) 'Remittances to Kerala: Impact on the Economy', *Middle East Institute,* February 2nd. Accessed 1/6/15: http://www.mei.edu/content/remittances-kerala-impact-economy.

Rajghatta, C. (2015) 'Global Gujaratis: Now in 129 nations', *The Economic Times,* January 4th. Accessed 21/5/15: http://articles.economictimes.indiatimes.com/2015-01 04/news/57663531_1_gujaratis-patels-united-nations.

Raman, K.R. (2010) (eds.) *Development, democracy and the state: critiquing the Kerala model of development.* London: Routledge.

Ramanathaiyer, S. & Macpherson, S. (2000) *Social Development in Kerala: Illusion or Reality?* Aldershot: Ashgate.

Ramirez, A. Ranis, G. & Stewart, F. (1998) 'Economic Growth and Human Development', *QEH Working Paper Series,* No. 18. pp.1-56.

Ranis, G. Stewart, F. & Ramirez, A. (2000) 'Economic Growth and Human Development', *World Development,* Vol.28, No.2. pp.197-219.

Romer, P. (1986) 'Increasing Returns and Long-Run Growth', *The Journal of Political Economy,* Vol.94, No.5, October, pp.1002-1037.

Sample Registration System (SRS) (2013) 'SRS Bulletin: Estimates of IMR, 1981-2011', Volume 47, No.1.

Saradamoni, K. (1994) 'Kerala Society and Politics', International Congress on Kerala Studies. Vol.1. Thiruvananthapuram: AKG Centre for Research Studies.

Sen, A. (1993) 'The Economics of Life and Death.' *Scientific American,* May. pp.40-47.

Sen, A. (2005) *The Argumentative Indian: Writings on Indian History, Culture, and Identity.* Boston: Macmillan.

Sinha, R. (1977) 'Poverty Unemployment and Development Policy: A Case Study of Selected Issues with reference to Kerala', *World Development,* Vol.5, Issue 3. pp.271-273.

Sinha, A. (2005) *The Regional Roots of Developmental Politics in India: A Divided Leviathan.* Indiana: Indiana University Press.

Sood, A. (2012) *Poverty Amidst Prosperity. Essays on the Trajectory of Development in Gujarat.* Delhi: Aakar Books.

Smith, A. (1776) *The Wealth of Nations,* Book 1.

Sun, Z. (2013) 'Explaining Regional Disparities of China's Economic Growth: Geography, Policy and Infrastructure', *University of California, Dept. of Economics,* December.

The Hindu (2011) 'BJP manifesto promises Gujarat as development model', April 5th. Accessed 9/4/15: http://www.thehindu.com/todays-paper/tp-national/tp-kerala/bjp-manifesto-promises-gujarat-as-development-model/article1601086.ece.

The Hindu, (2013) 'Dubai is like a second home to Malayalis', January 7th. Accessed 1/5/15: http://www.thehindu.com/todays-paper/tp-national/tp-kerala/dubai-is-like-a-second-home-to-malayalis/article4281775.ece.

The Economic Times (2013) 'Gujarat promises continued, accelerated and all-around progress: Jagdish Bhagwati & Arvind Panagariya', January 2nd. Accessed 18/5/15: http://articles.economictimes.indiatimes.com/2013-01-02/news/36111596_1_kerala-model-gujarat-model-social-indicators.

The Economist (2011) 'India's Guangdong', *The Economist Online,* July 7th. Accessed 20/5/15: http://www.economist.com/node/18929279.

The Economist (2013) 'Social Progress: Beyond GDP', *The Economist Online,* April 18th. Accessed 10/3/15: http://www.economist.com/blogs/feastandfamine/2013/04/social-progress.

The Economist (2015a) 'The Gujarat model. How Modi-nomics was formed in one of India's most business friendly states', *The Economist Online,* January 10th. Accessed 9/3/15: http://www.economist.com/news/finance-and-economics/21638147-how-modi-nomics-was-forged-one-indias-most-business-friendly-states.

The Economist (2015b) 'The twilight of the resource curse?', *The Economist Online,* January 10th. Accessed 13/5/15: http://www.economist.com/news/middle-east-and-africa/21638141-africas-growth-being-powered-things-other-commodities-twilight.

ul Haq, M (1990) 'Human Development Report 1990', *United Nation Development Programme.* New York: Oxford University Press. Accessed 10/3/15: http://hdr.undp.org/en/reports/global/hdr1990.

Ullekh, NP (2013) 'Amartya Sen vs. Bhagwati: Who is right in the debate on Gujarat-Kerala growth models?' *The Economic Times*, July 28th. Accessed 25/2/15: http://articles.economictimes.indiatimes.com/2013-07-28/news/40833881_1_gujarat-model-jagdish-bhagwati-growth.

United Nations (UN) (2014), 'Human Development Report', *United Nations Development Program.* Accessed 8/4/15: http://hdr.undp.org/en/content/table-2-human-development-index-trends-1980-2013.

Unnithan, C. (2012) 'Family is Key to success of Gujarati businessmen in Britain', *Times of India,* May 23rd. Accessed 26/5/15:

http://timesofindia.indiatimes.com/city/ahmedabad/Family-is-key-to-success-of-Gujarati-businessmen-in-Britain/articleshow/13401987.cms.

Weil, D.N (2004) *Economic Growth*, Boston: Addison Wesley.

Wikimedia (2015) 'Map of Gujarat State and districts', Accessed 26/5/15: http://commons.wikimedia.org/wiki/File:Map_Gujarat_state_and_districts.png.

World Bank (2012a) *World Development Indicators 2012*. Washington, DC: World Bank. Accessed 8/4/15: http://data.worldbank.org/indicator/NY.GDP.PCAP.CD?page=6.

World Bank (2012b) *The State of the Poor: Where are the Poor and where are the poorest?* April. Accessed 9/3/15: http://www.worldbank.org/content/dam/Worldbank/document/State_of_the_poor_paper_April17.pdf.

World Bank (2014) 'Population Data', November 2014. Accessed 27/5/15: http://data.worldbank.org/indicator/SP.POP.TOTL

World Bank (2015) *World Development Indicators: GDP Growth Rates,* April. Accessed 26/5/15: http://data.worldbank.org/products/wdi