## LINKING INFRASTRUCTURE GROWTH WITH HUMAN DEVELOPMENT: EVIDENCES FROM GUJARAT

## **Pratham Parekh**

Research Fellow, Central University of Gujarat

## ABSTRACT

The notion of human development essentially addresses the human in development — all those elements which make a person human not only in terms of what she /he needs for basic survival such as food, clothing or shelter, health, etc, but a sense of dignity, ability to mix with others without being ashamed to appear in public. It is the process of enlarging people's choices. The human development approach looks at income as a means, not as an end, to people's development, in contrast with the earlier growth models. Many studies in field of sociology of development argues that that there is no automatic link between income and human progress.

The term human development denotes both the process of widening people's choices and the level of their achieved wellbeing. It also helps in distinguishing, clearly, between two sides of human development. One is the formation of human capabilities, such as improved health or knowledge; the other is the use that people make of their acquired capabilities. In contrast with earlier theories and models, the human development approach broadens the concept to not only include issues such as basic needs and income, but also people's choices — on what people should have to be able to ensure their own livelihood without ending up as mere beneficiaries. Human development is, moreover, concerned not only with basic need satisfaction but also with human development as a participatory dynamic process.

Infrastructure is an indicator for expansion, diversification and modernization of the economy culminating in an improvement in living standards. It is always argued that if the goals of development are to be achieved an efficient and adequate infrastructure is an important precondition. Infrastructure is the physical framework of a region that helps the region in its progress and prosperity. Inadequacy of Infrastructure is observed as the major reason for the underdevelopment.

Though Infrastructure contributes to economic growth both by increasing productivity. It is intriguing required to investigate how Infrastructure services which are meant to expand choices of people are affecting capabilities of people. Linkages of infrastructure development and human development moves beyond realm of any particular discipline, making it more complex and multi disciplinary phenomenon to study.

Keywords: Infrastructure Growth, Human Development, Economic Growth.

## INTRODUCTION

The study of development has remain subject interest of sociology since inception of discipline. Sociology of development attempts to study the causes and consequences of economic changes in society. Initial theories of Marx (1867) and Weber (1904) provides debaters concerning to rise and evaluation of capitalism. The sociological inclination towards analysis of causes and consequences of development has supported development of Parsonsian functionalism, Neo-Marxist Theories and World Systems theories. Such development theories considered interrelation between economic growth and life of an individual stimulated by models of demography<sup>1</sup>, models of migration,

models of historical transformation, gender roles, etc. It also consistently presented dialectical picture of economic growth, labour force, social institutions, and power of monetary value (capital). On parallel line, Political sociology shown up theories related to role of the State in producing and supporting economic growth; to change in political fabric based on economic change; to role of economy in distributing power among social groups etc. while economic sociology assumed economic development as established ground to test such theories.

Sociology of development studies practices and process of social change by addressing challenges of international or internal migration, political transformations, changes in family formation, technological changes, demographic and

1 Many based on changes occurring in mortality and fertility.

economic growth (and changes) along with production and reproduction of inequality due to these changes. Thus, it is easy to view development at axel of sociological enterprise. There exists good amount of debates over material and nonmaterial perception of development and its effect over society.

The debate of Marx & Weber over origins of capitalism stimulated generations of sociologists who developed their own perception over material and non-material (mostly cultural) determinants of industrialization and modernization. Generally, followers of weber strived for functional equivalents of Protestantism in world (Eisenstadt, 1974). Many other scholars extended Weber's analysis to understand cultural and organizational factors which are capable of transforming traditional societies into modern one through material improvement (Moore, 1966); to grasp the demand for autonomy (mainly institutional) began in protestant church and extended to political & economic regimes (Fulbrook, 1983); 'manufacturing social formation' (Gould 1987); 'world culture' (Meyer, Boli, Thomas, & Ramirez, 1997)'disciplinary state' (Gorski 2003) and so on.

The scholars having Marxist perception shows obsession for materialist models and argues about centrality of power in support and development of capitalism with potent elites to bring transformation in economic institutions for personal benefits (Collins, 1986). The roots of development capitalism in such theories is perceived to in interstices of structures created by elites or actors with social powers (Mann, 1994). While some scholars perceived development of capitalism is due to conflict among (European) feudal elites Lachmann (2003). Late generation of development sociologists focused on relations of countries or international relation their dynamics to prove domination over global market associated political interests (like Wallerstein (1979), Arrighi (1994), Chase-Dunn and Hall (2016), and others). Such perception proved that success of Europe's development is directly linked with underdevelopment of various Asian countries which rests at that capitalist periphery. Another strand of development sociologists provide perception over capitalist development, state formation, war-making and primitive capitalist which gets affected by imperialism (Emigh, Riley, & Ahmed, 2016). Scholars working on late capitalism also provides supporting arguments by linking development with surplus value extracted from south and usage of military for capital accumulation in core (Frank, 1967).

Sociology of development of has remained important component for understanding stratification and inequalities emerging out from development dynamics. Sociology is potent discipline grasp inter and intra-national and economic differences through variety of indicators of human wellbeing (Logan, Molotch, Fainstein, & Campbell, 1987; Jorgenson & Burns, 2007; Shandra & Shor, 2015). By using quantitative and qualitative methods, this strand of sociological research highlights humane, spatial, ecological, climatic and gendered variation in patterns of inequality and power dynamics (Lobao, 2016).

On parallel grounds, public sociology as novel developing strands of sociological discipline engages with nonacademic experts or policy framers with application of sociological perceptions. It is mostly understood as "style" of sociology rather a method or theory. The term gained popularity after Michael Burawoy's presidential address (in 2004) at America Sociological Association. Burawoy (2005) differentiated public sociology with professional sociology which is domain of academically trained sociologists. Public sociology focuses on the issues with substantial public concerns which includes discourses and debates on public policy, activism, and advocacy, purpose of social movements and institutional dynamics of civil society. This strand of disciplines leveraged by its empirical methods and theoretical approach to grasp debates not just related to "what is " or "what has been" in society but to "what might be". Public sociology, till now remained normative and political in its nature, which is essential to grasp phenomenon of development through public policy perception (Piven, 2007 &Burawoy, 2014). The study subscribes few of the aspects of public sociology in order to present normative empirical evidences of human development and its association with public policies.

This chapter attempts to outline major theories, perceptions and arguments of sociology of development and human development with its mechanism of formulation and measurement. The chapter also briefly outlines major strands and argument of development theories along with outline of the study and basic demographic and geographic information of Gujarat.

### **GROWTH VS. DEVELOPMENT**

The development discourse after world war – II and claims that since inception, development discourse is dominated by concept of INCOME (Drèze & Sen, 1999). Income was considered as sole measure to human wellbeing. The authors criticized such measure of national or per capita income as fault full approach to measure social welfare or human wellbeing. Similarly, many scholars has criticized concept of GDP or GNP to measure human well-being because national income considers (McGillivray & White, 1993):

- Only (registered) monetary exchanges
- Inclusion of goods/commodities/services with no or less social well-being utility e.g. expenditure on nuclear weapons
- Natural resources as free or taken for granted
- Freedom, human rights, justice, creativity and leisure as non-valuable
- Distribution of income an even and justifiable

Two major assumptions; first, economic growth "trickle down" and spreads its benefits across society and second, if economic growth do not succeed to trickle down, income disparities is raised and forces to governments to intervene or regularized in market can considered inconsistent to understand development (Hicks and Streeten, 1979). In both way, per capita income is reduced to poverty because neither assumption can prove that high concentration of income, unequal growth for prolonged periods has tendency for growth to spread, nor governments driven by political interests' shows signs to correct inequalities.

An index of economic performance based groups were derived on basis of income and assets and weighted importance of each group's requirement for growth before devising measure for social welfare (Ahluwalia, Duloy & Jolly,1974). Authors through this index weighted out poorest group with highest requirement of growth. This index was consistent with Rawls' idea of social welfare. This measure argued about giving equal weight to income of each member of society e.g. increase of at least 1% will increase income of all group by 1%. It makes clear that equal share of income from total income is most important factor for society's wellbeing and such approach of measurement translate GDP growth into social welfare.

"People are the real wealth of a nation. The basic objective of development is to create an enabling environment for people to enjoy long, health and creative lives. This may appear to be a simple truth. But it is often forgotten in the immediate concern with the accumulation of commodities and financial wealth." - Human Development Report, United Nations Development Programme, 1990.

Jean Drèze and Amartya Sen (1991) differentiated a growthmediated and support-led government intervention and regulations. According to authors, growth-mediated method of intervention supports "trickle down" approach (which means that improvement in private income will create basis for payment of social services). In such case governments tends to increase GDP and tax base. While support led strategies do not focuses on increasing national income but providing social services directly which can include guarantees for income, income equalization, health and education, no matter what level of GDP growth is. As per authors, there exists no inevitable linkages between national income and quality of life. Political willingness and public action translates GDP growth in to human well-being, poverty reduction and narrowing inequalities.

## DEMOGRAPHIC & ECONOMIC GROWTH PATTERN OF GUJARAT

Clearly, Expansion of human capabilities and wellbeing is based on economic growth. Economic ecology plays vital role in determining quality of life. Aggregate incomes supports and enhance fiscal resources which further allows more per capita spending over health, education and other capability indicators. Fortunately, Gujarat was/is able to translate its economic growth into human wellbeing. Per capita income of Gujarat is has remained higher than national average and this contributed in reduction of poverty in the State.

The population of Gujarat is 6.04 crore comprising 3.15 crore males and 2.89 crore females. Of this, the rural population stands at 3.47 crore and the urban population 2.57 crore. In terms of percentage, Gujarat accounts 5.97% of the area of India and 4.99% of the population of India. The decadal growth rate of state is 19.28% as compared to all India growth rate of 17.68%. Population density (persons per sq.km.) in census 2011 works out to be 308. Rural population constitutes 57.4% of the total population and the urban population is 42.6%. Persons in age-group 10-19 years (Adolescent) have decreased by 1.55% in census 2011 (19.88%) as compared to census 2001 (21.43%). Persons in age-group 15-24 years (Youth) decreased by 0.51% in census. 2011 (19.27%) as compared to census 2001 (19.78%). Persons in age-group 15-59 years (Working age) have also decreased by 2.63% in census 2011 (60.19%) as compared to census 2001 (62.82%). Whereas, persons in age-group 60 years and above have increased by 1.01% in census 2011 (7.92%) as compared to census 2001 (6.91%).

2 The social welfare function that uses as its measure of social welfare the utility of the worst-off member of society. The following argument can be used to motivate the Rawlsian social welfare function. Imagine a group of individuals who have not yet entered the economy (they are 'behind the veil of ignorance') so do not yet know what position they will occupy. That is, they may become rich members of the economy or poor members. If asked what form of social welfare function they would wish the economy to have an extremely risk-averse individual would propose the Rawlsian.- Oxford Dictionary of Economics The Scheduled Caste population in the state is 40,74,447 (6.74%) in 2011 and the Scheduled Tribe population in the state is 89,17,174 (14.75%) in 2011.

In Gujarat, as per Population Census 2011, the total number of workers (who have worked for at least one day during the reference year) is 247.68 lakh. The Work Participation Rate (WPR) for the Gujarat works out to 41.0 per cent, which is higher than the national average (39.8%). For the first time in Census 2011, the marginal workers, i.e. workers who worked for less than six months in the reference year, have been sub-divided in two categories, namely, those worked for less than 3 months and those who worked for 3 months or more but less than six months. In Gujarat, out of 247.7 lakh total workers, 203.7 lakh are main workers and the remaining 44.0 lakh are marginal workers. Amongst the 44.0 lakh marginal workers, 39.3 lakh (89.3%) worked for 3 to 6 months whereas only 4.7 lakh (10.7%) worked for less than 3 months in the state.

The State economy has been measured in terms of the Gross State Domestic Product (GSDP) at factor cost at constant prices as well as at Current prices. GSDP estimates over a period of time reveal the extent and direction of the changes in the level of economic development. Sectorial Composition of GSDP gives an idea about the relative position of different sectors in the economy over a period of time, which not only indicates the real structural changes taking place in the economy, but also facilitates in formulation of the plans for overall economic development. The present base year for GSDP estimation at constant prices is 2011-12. As per the Quick Estimates, the Gross State Domestic Product (GSDP) at Market prices at constant (2011-12) prices in 2014-15 has been estimated at Rs. 782,820 crore as against Rs. 726,831 crore in 2013-14, registering a growth of 7.7 percent during the year. Gross State Domestic Product at Market prices at current prices in 2014-15 has been estimated at Rs. 895,202 crore as against Rs. 806,745 crore in 2013-14, registering a growth of 11.0 percent during the year. The share of primary, secondary and tertiary sectors has been reported at 19.4 percent, 42.6 percent and 38.0 percent respectively to the GSVA (Rs. 7, 94,563crore) in 2014-15 at current prices.

#### Pattern Of Fiscal Allocation For Capability Development

Translating economic growth into Human development and poverty reduction has remained integral strategy of state's planning and policy making. Government of Gujarat claims to give highest priority to development of Social Sectors which have direct and indirect impact on reduction in poverty by allocating nearly about by allocating nearly half of planned budget. From 2002-2007 government has allocated Rs. 18,090 crore (38% of planned budget), from 2007 – 2012 government has allocated Rs. 53,830 crore (42% of planned budget) and from 2012-2017 government has increased allocation upto Rs. 1,58,736 crore which is about 46% of planned budget (Planning Division , 2016).

Allocation of financial resources is primary ingredient to strengthen and sustain any kind of development. Since decade commitment of Gujarat towards and poverty reduction can be gauged from table-1.

	(RS.in Crore)								
Sector / Year - >	2007-08	2008-09	2009-10	2010-11	2011-12	2013-14	2015-16	2016-17	
Education	1070	1366	1600	1900	2599	3850	6700	6900	
Health & Family Welfare	565	845	1132	1900	2195	3845	6594	7005	
Water Supply	1220	1549	1549	1849	1886	2700	3463	3400	
Housing	917	771	1043	1422	1490	5874	3869	3876	
Urban Development	1716	2471	2611	2900	3014	3481	8819	9260	
Social Welfare	450	612	632	811	996	1450	2094	2750	
Welfare of Tribes	210	255	270	405	700	954	1500	1600	
Labour & Employment	80	127	119	260	334	891	1183	1233	
Women & Child Welfare	197	380	800	936	1264	1300	2450	2600	
Total Allocation	6426	8376	9758	12383	14478	24345	36672	38624	
<b>Total Planned Budget</b>	16000	21000	23500	30000	38000	59000	79295	85558	
% allocated for Social									
Sector	40.16	39.89	41.52	41.28	38.10	41.26	46.25	45.14	

Table-1: Financial Resources Allocated for Social Sector

Source: Author's Analysis on Data Provided by Planning Division, General Administration Department, Government of Gujarat.

e 2018 | ISSN 2319-1740

## LINKAGES OF INFRASTRUCTURE & CAPABILITY DEVELOPMENT IN GUJARAT

#### **EDUCATION**

With adaptation of MDGs, world has observed exceptional motivation for universal access to education. Several countries like Korea, Sri Lanka, Japan, etc. invested heavily for providing universal access to education which further resulted into improvement of their human development index. By 2009, In India, access to education is granted as fundamental right through Right to Education Act 2009. Educational services along with educational infrastructure gained attention of policy framers. Gujarat too has taken number of policy initiatives and increased investment almost 6 times more in educational infrastructure and services in a decade i.e. from Rs. 1,070 crore in 2007 to 6900 in 2017.

Various mission mode programmes were/are formulated and implemented in vigorous manner for enrolment & retention in schools, linking education with vocations, skill development, and mapping labour supply & with market demand for generation of employment & entrepreneurship.

The number of educational institutions imparting primary education in the State were 43,638 in 2014-15 as against 43,176 in 2013-14. The number of pupils enrolled in these schools were 91.42 lakh in 2014-15 as against 92.29 lakh in 2012-2013. The number of institutions imparting secondary and higher secondary education has increased from 10,537 in 2013-14 to 10,811 in 2014-15. Whereas, the number of students has also increased from 27.02 lakh in 2013-14 to 27.32 lakh in 2014-15.

The process of improving retention and decreasing dropout rate for elementary level (Std. I - V) is encouraging. The dropout rate for elementary section has decreased substantially from 22.30 percent in 1999-00 to 1.97 percent in 2014-15. Similarly the dropout rate for the standard I to VII has also decreased from 41.48 percent in 1999-00 to 6.61 percent in 2014-15.

ICT infrastructure with digital learning material also provided to most of schools, which makes Gujarat a leading state among states of India. Over 95% schools have access to electricity enabling 71.23% schools of rural areas and 85.66% schools urban areas to use ICT infrastructure.

**Table-2: Percentage of Schools Having ICT Infrastructure** 

	RuralAreas	Urban
Gujarat	71.23	85.66
India	21.1	25

**Source:** Department of School Education and Literacy, Ministry of Human Resouces Development, Government of India

In larger picture, Literacy rate of Gujarat is risen upto 79.3% in 2011 against 69.1% in 2001. Literacy rate of female also improved significantly in during said decade from 57.8% to 70.7%. Due to this gender gap in education is also reduced to 16.1 in 2011 from 21.9 in 2001 (Directorate of Economics & Statistics, 2015). This change accredits to universal access to education attributing 3rd rank of Gujarat in Education Development Index.

#### HEALTH

In Gujarat, It is observed that focus is made more on medical human resources and medical services as compared to physical health infrastructure. Health infrastructure of state serves as enabling factor to health care service delivery. In 2015 state had 322 community health centres, 1,300 primary health centres and 7,710 sub-centres which treated 223.28 lakh outdoor patients and 18.99 lakh indoor patients (Directorate of Economics & Statistics, 2016). "in 2016 we are adding 32 Community Health Centres, 130 Primary Health Centres and 1035 Sub Centres " – Senior Officer, Planning Division.

Interestingly, Gujarat successfully linked education with health through programmes like School Health Check-up Programme which is largest time bound health programme covering all children of age 0-18 year. The programme covered 157.96 lakh children out which 1,25,696 children were provided referral services, 6,207 children were provided super specialty care. Another flagship scheme titled "Chiranjivi Yojana" targeting mortality rate of mothers and children effectively contributed to improvement in nutritional status of the poor (table-3). The programme addresses nutrition, gender and pre-post natal care aspects. "Availability of hospitals, trained manpower, information and emergency services has made upto 98.2% of institutional deliveries among poor and non-poor population which is big achievement for us..." - Senior Officer, Health and Family Welfare Department.

4 Gujarat health care service delivery is divided into three parts on the basis of national common structure i.e. Primary health care basically provides basic minimum care with more focus on preventive minimum care with more focus on preventive aspects and public contact. Curative services are also provided there but they are minimal in nature. While secondary care is mix of both curative as well as preventive. Tertiary care is basically meant for high level of curative care and research studies.

Doctors visited patients

<sup>3</sup> Education development Index is constructed by Ministry of Human Resource Development, Government of India covering 4 components i.e. Access, Infrastructure, Teachers & Outcomes with about 23 indicators.



#### **POWER SUPPLY**

Power sector of Gujarat is most appreciated across the country. State have achieved 100% electrification. Cutting across geographies, villages and cities are having uninterrupted electricity supply. Such crucial achievement

Infant Mortality Rate	2001	2001		2005	2007	2009	2011	011 201		
Gujarat	60		57	54	52	48	41		36	
All India	66		60	58	55	50	44		40	
Maternal Mortality Rate		2001 -03		4 -06	2007 -09	7 -09 2010 -		12 2011 -13		
Gujarat		172		160	148		122		112	
All India		301		254	212	178		167		
		1998 -2002				2013				
Life Expectancy at Birth (Male)		62.4				69.2				
Life Expectancy at Birth		64.4				72.5				
(Female)										

#### Table-3: Health Indicators contributing to capability development

Source: Planning Commission (now NITI Aayog) & Sample Registration System, Census of India, Government of India

with "Information Education and Communication" which give guidence to new mother for handling, mananging and caring the new born. About 253 vehicles are operational which accessed by remotest population leading to increase in awareness about institutional delivery.

As per the India Human Development Report (IHDR) 2011, Gujarat ranked at 6th position among 18 major states of India. Continuous increase in fiscal provisions for healthcare since decade (graph-1) in health care infrastructure in Gujarat is observed which supports a claim for improvement in health related human development indicators and multi-dimensional poverty indicators at large.

**Graph-1:** % of allocation for Health Infrastructure in total social sector



6Patient visited doctors

has positively affected various sectors health, education and industries. Assurance of power supply for cooking, agriculture, education, health care, and industrial production has boosted up industrial investment, better irrigation, farm mechanization, virtual learning, medical tourism etc.

"As of December 2015, Gujarat had a total tied up installed power generation capacity of 24,606 MW (comprised of 12,056 MW 8617 MW and 3,933 MW under private, state and central utilities, respectively) to meet the energy demand of the State. Thermal power contributed 18367 MW to the total installed power generation capacity, followed by hydropower (779.00 MW), nuclear power (559.00 MW) and renewable power (4901 MW). Moreover, 100 % of Gujarat's villages have electricity connections for 24x7 power supply through programmes like Jyotirgram Yojana." – Planning division, Government of Gujarat.

# CAPABILITY DEPRIVATION AND DEVELOPMENTIN GUJARAT

Investment of public money is reflection of socio-political choices. Historically, Gujarat has remained major contributor India's economic development. Political

18 major states are categorized on the basis of geography and demography



commitment for development and efforts of translating economic development into social development has been globally applauded. Since decades state has striven to improve quality of life through holistic planning and innovative policy formulation & intervention. Such innovative and proactive policy intervention had improved social indicators contributing to improvement of human development and poverty reduction scenario.

"In terms of human development and poverty reduction, Gujarat aims to become a model State on all fronts of Human Development and addressing multidimensional poverty. Every single person in the State of Gujarat irrespective of gender, caste or creed would, Be literate and healthy; Have shelter and clean environment; Have drinking water and sanitation; Be gainfully employed; Be able to live without fear; Have equal opportunities...

To address specific issues of the underprivileged societies and areas, State Government has started "Flagship Programmes" like Sagarkhedu Sarvangi Vikas Yojana, Vanbandhu Kalyan Yojana, Garib Samruddhi Yojana and 49 Developing Talukas. Besides, various "Mission Mode Programmes" like Kanya Kelavani, Gunotsav, Krishi Mahotsav, Nirmal Gujarat, Skill Development, Nirogi Bal, Bal Sakha Yojana, Balbhog Yojana, Mamata Abhiyan, e-Mamta, MA, Mukhyamantri Amrutum Vatsalya Yojana, eMPOWER, Chiranjeevi Yojana, Kaushalya Vardhan Kendra, Mukhyamantri Yuva Swavalamban Yojana etc. are also being implemented to improve Human Development Index of the State...."- Senior Officer, Planning division

#### **FINALWORD**

Observing Gujarat's efforts for development it becomes clear that there exists a linkage between infrastructure and capability development which further helps to address multidimensional poverty. Such linkages are directly evident in terms of creation and maintenance of certain standards promoted by political commitment for sustainable capability development. With well-developed roads, incessant power supply, schools and health centres in remotest areas, access to credit, etc. supported by huge public investments has ensured wellbeing of citizenry in Gujarat. The State now need to focus more on more diverse and innovative way to address capability deprivation. For example, addressing special needs of various social groups like nomadic and primitive tribes who are not joining educational institutions due to their cultural setups. Such issues are need to be addressed in more innovative and strategic manner. However, Gujarat has successfully proven that economic growth can be translated into human development and able to partly address issue of multi-dimensional poverty. Of course, there is evidences and scope for wider research into this area.

Economic growth indicated by Infrastructure can create direct and efficient impact on wellbeing and development of human capabilities. Infrastructure related to social causes like mortality reduction, increasing schooling and literacy, generating employment, public amenities, uninterrupted power and water supply enables to break barriers of physical, economic, and financial limitations. Investment in formulating systems or establishing agencies to help needy people and ensuring access to services can generate more participant of communities. Reduction in poverty and building capabilities can be directly addressed by directing economic systems for larger social good.

This further empowers populace to negotiate, and to benefit from the world outside their own domain. Access to multiple options, life chances, and capabilities makes citizenry and not only state as responsible stakeholder of development.

#### REFERENCES

- Arrighi, G. (1994). The long twentieth century: Money, power, and the origins of our times. Verso.
- Burawoy, M. (2005). For public sociology. American sociological review, 70(1), 4-28.
- Burawoy, M. (2014). The public sociology debate: Ethics and engagement. A. Hanemaayer, & C. J. Schneider (Eds.). UBC Press.
- Chase-Dunn, C., & Hall, T. D. (2016). The Historical Evolution of World-Systems. In Strukturelle Evolution und das Weltsystem (pp. 281-298). Springer Fachmedien Wiesbaden.
- Chenery, H., Ahluwalia, M. S., Duloy, J. H., Bell, C. L. G., & Jolly, R. (1974). Redistribution with growth; policies to improve income distribution in developing countries in the context of economic growth. Oxford University Press.
- Collins, R. (1986). Is 1980s sociology in the doldrums?. American Journal of Sociology, 1336-1355.
- Eisenstadt, S. N. (1974). Studies of modernization and sociological theory. History and Theory, 13(3), 225-252.
- Emigh, R. J., Riley, D., & Ahmed, P. (2016). States, Societies, and Censuses. In Changes in Censuses from Imperialist to Welfare States (pp. 7-20). Palgrave Macmillan US.

<sup>8</sup> Gujarat has road network worth 79755 km i.e. 97.45% of road connectivity

- Frank, A. G. (1967). Capitalism and underdevelopment in Latin America (Vol. 93). NYU Press.
- Fulbrook, M. (1983). Piety and politics: Religion and the rise of absolutism in England, Wurttemberg and Prussia. Cambridge University Press.
- Gorski, P. S. (2003). The disciplinary revolution: Calvinism and the rise of the state in early modern Europe. University of Chicago Press.
- Gould, M. (1987). Revolution in the Development of Capitalism: the Coming of the English Revolution. Univ of California Press.
- Hicks, N., & Streeten, P. (1979). Indicators of development: the search for a basic needs yardstick. World Development, 7(6), 567-580.
- Human Development Foundation (2009). The Human Development Foundation - The Human Development Concept. Retrieved 1 20, 2016, from h t t p : / / w w w . h d f . c o m / : http://www.hdf.com/dotnetnuke/humandevelopment/Int roduction.aspx
- Jorgenson, A. K., & Burns, T. J. (2007). Effects of Rural and Urban Population Dynamics and National Development on Deforestation in Less Developed Countries, 1990–2000. Sociological Inquiry, 77(3), 460-482.
- Lachmann, R. (2003). Elite self-interest and economic decline in early modern Europe. American sociological review, 346-372.
- Lobao, L. (2016). THE SOCIOLOGY OF SUBNATIONAL DEVELOPMENT. The Sociology of Development Handbook, 265.
- Logan, J. R., Molotch, H. L., Fainstein, S., & Campbell,

S. (1987). The city as a growth machine (pp. pp-199).

- Mann, M. (1994). In praise of macro-sociology: A reply to Goldthorpe. The British Journal of Sociology, 45(1), 37-54.
- McGillivray, M., & White, H. (1993). Measuring development? The UNDP's human development index. Journal of International Development, 5(2), 183-192.
- Meyer, J. W., Boli, J., Thomas, G. M., & Ramirez, F. O. (1997). World society and the nation state. American Journal of sociology, 103(1), 144-181
- Moore, W. E. (1966). Global sociology: the world as a singular system. American Journal of Sociology, 475-482.
- Piven, F. F. (2007). From public sociology to politicized sociologist. Public sociology: Fifteen eminent sociologists debate politics and the profession in the twenty-first century, 158-166.
- Planning Commission. (2011). India human development report 2011: Towards social inclusion. New Delhi: Institute of Applied Manpower Research.
- Planning Division. (2016). AnnualDevelopment Plan 2016-17. Government Of Gujarat.
- Planning Division. (2016). Development Programme-Highlights. Government Of Gujarat.
- Sen, A. (1999). Commodities and capabilities. OUP Catalogue.
- Sen, A. (2001). Development as freedom. Oxford University Press
- Shandra, J. M., & Shor, E. (2015). Debt, structural adjustment and deforestation: A cross-national study. Journal of World-Systems Research, 14(1), 1-21.