

“Manufacturing cities: Industrial policy and urban planning in India”¹

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Abstract

Policy makers in India are increasingly focused on the critical importance of managing India's urban transition to ensure the sustainability of the growth and inclusion agenda in the coming decades. India's economic transition to a middle-income country has been fuelled largely by growth in the services sector, which has failed to provide opportunities for a large unskilled workforce. To address this concern, successive governments have attempted to promote industrialization, with limited success. One of the strategies the Indian government has adopted has been the creation of particular types of industrial settlements and zones to simultaneously meet the goals of industry-led growth and to decongest existing cities.

This model of growth draws on the successes of other East Asian countries such as China and South Korea where particular zones were developed to facilitate export-oriented industrialization. However, the corresponding policy push to develop Special Economic Zones (SEZs) in India, which relied heavily on investment by private developers, met with limited success. This has been replaced by a more recent proposal to develop industrial corridors and regions, in which the state plays a more prominent role. The newly elected government in 2014 has put a renewed emphasis on industrial policy through its highly publicized Make in India campaign that aims to revitalize manufacturing in India.

The corridor policy of the government continues to draw upon the successes of particular East Asian models to promote manufacturing-led growth in India. However, the particular type of development that such policy aims to promote does not reflect the economic and urban reality of India. India's urbanization during the past decade has been driven by the emergence of a large number of smaller, more dispersed settlements and not by metropolitan expansion (Denis et al., 2012a). The economy is dominated by the services sector, while most of the employment in the manufacturing sector is concentrated in small, informal enterprises. Through this focus on developing greenfield industrial cities, the state is simultaneously ignoring

the tremendous infrastructure requirements of its existing small and medium towns as well as pushing a model of capital intensive growth which will fail to meet its employment objectives in the medium and long term.

Drawing on work on urban planning and policy, and on economic planning and development, as well as on primary work carried out along the Delhi-Mumbai Industrial Corridor, this paper raises concerns about the feasibility of such policy in the Indian context. In particular, it assesses the aspirations of the state regarding an industrial-led urban transition and the ways in which these are disconnected from India's urban and economic reality.

The paper begins by introducing the urban and industrial policy environment and the institutional context within which these decisions are being made. This is followed by an examination of the aspirations and assumptions of Indian state actors regarding planning and building these industrial settlements, concluding with questions about the feasibility of such an approach.

1. Introduction

Policy makers in India are increasingly focused on the critical importance of managing India's urban transition to ensure the sustainability of the growth and inclusion agenda in the coming decades. For the first time since independence, urbanization is becoming an economic and developmental priority as national and state governments in India are actively building policies focusing on urban regions.² Growth in the Indian urban population (United Nations Population Fund, 2007) has coincided with rapid rates of economic development and the gradual opening up of the economy to foreign investment.

Until the late 1990s, urban India did not feature very prominently in national or regional government policy. The planned approach that the Government of India adopted after independence ignored urban requirements, for the most part. Following on the heels of the economic reforms of the 1990s that increased private sector investment in Indian cities, several fundamental legislative changes were implemented particularly targeting urban regions (Weinstein et al., 2013). These included the 74th Constitutional Amendment Act (1992) mandating the devolution of power to local governments and municipal authorities and the repeal of the Urban Land Ceiling Regulation Act (ULCRA) that regulated the amount of land individuals were allowed to hold and develop in urban areas. Continuing this trend of urban reform, in December 2005, the Indian national government also launched the country's most ambitious urban reform program: the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), committing to investing over USD 20 billion in India's cities over a period of seven years (Weinstein et al., 2013).

² The urban development programs implemented by the national government include: the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT), the Model Municipal Law (MML), the e-Governance Mission, Report Cards on Urban Services, Citizens' Charter on Municipal Services, the Mayor-in-Council form of government, Municipal Accounting Reforms, Property Tax Reforms, issuance of tax-free Municipal Bonds, and schemes such as Pooled Finance Development (PFDS) and City Challenge Fund (CCF), promotion of private sector participation and community participation. (Aijaz, 2008)

Over the last couple of decades the Indian national government has also begun to develop specific types of industrial and economic development policies that have led to the emergence of different urban forms. These include the development of Special Economic Zones (SEZs), National Investment and Manufacturing Zones (NIMZs), and new towns in and around existing urban regions that focus on specific types of industrial and economic activities. The most recent, and perhaps one of the most ambitious strategies is the push to develop industrial corridors between major Indian cities, which the Indian national government has embraced as a key development strategy. For example, work on the Delhi-Mumbai Industrial Corridor (DMIC) is already underway while a second corridor between Mumbai, Bangalore, and Chennai is being planned. This follows earlier government policies like the development of the Golden Quadrilateral and the North-South and East-West corridors that emphasised building transportation infrastructure (chiefly highways) that connected the four major Indian metros (Delhi, Mumbai, Kolkata, and Chennai). The development of these industrial corridors has multiple stated goals, which include improving infrastructure, enabling exports, generating employment, and linking fast-growing regions to relatively poorer regions.

The corridor policy of the government draws upon the successes of particular East Asian models to promote manufacturing-led growth in India. However, the particular type of development that such policy aims to promote does not reflect the economic and urban reality of India. India's urbanization during the past decade has been driven by the emergence of a large number of smaller, more dispersed settlements and not by metropolitan expansion (Denis et al., 2012a). The economy is dominated by the services sector, while most of the employment in the manufacturing sector is concentrated in small, informal enterprises. Through this focus on developing greenfield industrial cities, the state is simultaneously ignoring the tremendous infrastructure requirements of its existing small and medium towns as well as pushing a model of capital intensive growth which will fail to meet its employment objectives in the medium and long term.

Drawing on work on urban planning and policy, and on economic planning and development, as well as on primary work carried out along the Delhi-Mumbai Industrial Corridor, this paper raises concerns about the feasibility of such policy in the Indian context. In particular, it assesses the aspirations of the state regarding an industrial-led urban transition and the ways in which these are disconnected from India's urban and economic reality. Focusing especially on the relationship between central and state governments in facilitating industrialization, we find that while state governments play an important role in industrialization, especially in the implementation of policy, the national government takes on the visioning and planning of certain types of industrial infrastructure as in the development of SEZs and industrial corridors. However, there are severe constraints on the availability of supporting regional infrastructure such as transportation and power and little co-ordination between various line ministries that have important functional overlaps in planning these settlements.

1.1. Economic Planning in India: A brief history

At independence, the Indian national government adopted a planned approach to development. The Five-Year plans were framed around economic sectors, and outlined specific measures that the government could undertake to promote particular areas of the Indian economy: for example, agriculture and heavy industry formed a significant proportion of the earlier plans (Corbridge and Harriss, 2000). The first three of these National Five-Year plans concentrated almost exclusively on economic and financial planning while largely ignoring the relationship between economic development and spatial planning (Jakobson and Prakash, 1967). Subsequent plans did focus more on urban development, but within a sectoral framework. A review of the Five-Year plans shows that a large proportion of new urban settlements in India emerged as a result of the decision to promote industrialisation in backward regions of the country, and that urban planning and policy for these settlements followed much after industrialisation. Moreover, since the Five-Year plans had a sectoral outlook, the little that was

granted to urban development fell through the cracks between different sectors (Chandrashekhar, 2010; Sivaramakrishnan, 1978).

As a result of growing concerns around urbanisation and related issues, the Planning Commission established the National Commission on Urbanisation (NCU) in the late 1980s to study various aspects of Indian urbanisation. The NCU published its final three-volume report in the late 1980s. The report focuses on several key areas, which remain concerns till today, such as the spatial structure of urbanisation, urban poverty, land and housing, and the planning, finance, and management of urban settlements (Mehta and Mehta, 1989).

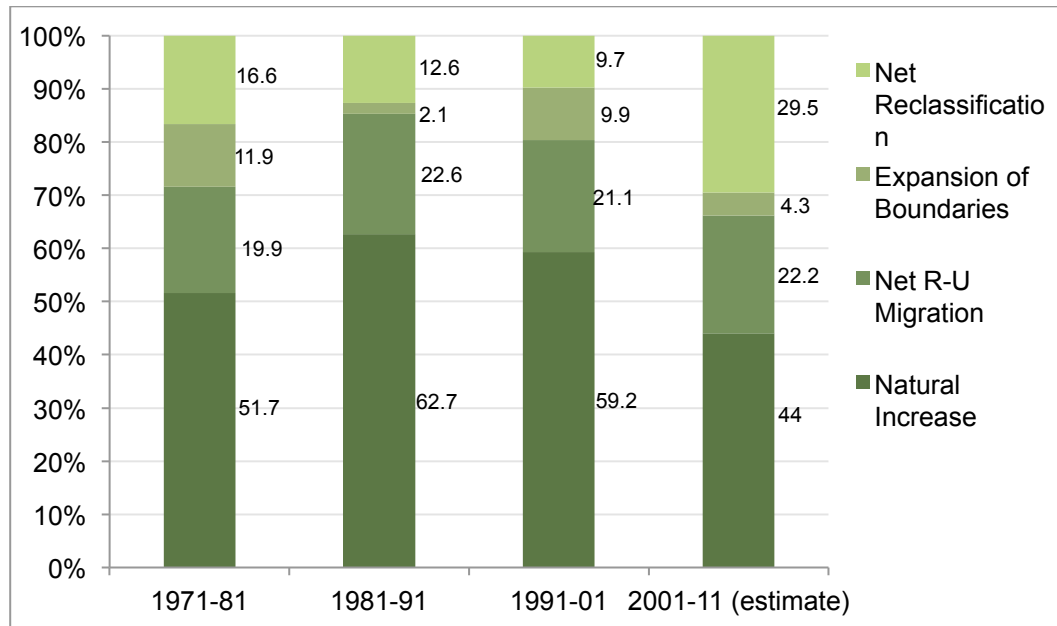
1.2. The changing nature of India's urbanisation

Since the economic reforms of the 1990s, there has been a renewed focus on urban India. The majority of these economic reforms benefited urban areas in India (Shaw, 2007). As Indian economic policy encouraged privatisation, urban regions emerged as key sites for economic growth (Dupont, 2011; Sankhe et al., 2010). Following on the heels of the economic reforms, several fundamental legislative changes were implemented, particularly targeting urban regions: the 74th Constitutional Amendment Act (1992) mandating the devolution of power to local governments and municipal authorities, and the repeal of the ULCRA that regulated the amount of land individuals were allowed to hold and develop in urban areas. In recent times, the urban has started to command a place of priority in policy and economic development.

The nature of Indian urbanisation itself is changing. During the last decade however, as Figure 1.1 explains, nearly 30 per cent of urban growth was, in fact, due to 'in-situ' (Pradhan, 2013) or 'subaltern' urbanisation (Denis et al., 2012b), i.e. the reclassification of existing settlements into 'census towns' according to Census of India criteria, and not because of rural to urban migration, or growth in the larger

Indian cities.³ The share of migration in driving urban growth has stayed fairly stable, at around 22 per cent. However, the share of natural increase in urban growth dropped from 59 per cent between 1991 and 2001 to only 44 percent between 2001 and 2011.

Figure 1: Components of urban growth.



Source: (Anand et al., 2014b); Figures for 1971–81 to 1991–01 are from High Powered Expert Committee (HPEC) (2011), figures for 2001–11 are from Pradhan (2013)

However, a large number of the settlements that have now been reclassified are urban in character, but lack the governance structures that urban areas require.⁴ Moreover, the census towns are only one kind of urban settlement that has emerged in India over the last decade. The Government of India has also begun to promote specific types of industrial and economic development policies over the last couple of decades that have led to the emergence of different kinds of settlements; the idea is that these will simultaneously meet the goals of industry-led growth and create alternative urban settlements, which will help decongest

³ The Census of India criteria for being classified as a town are that the settlement has population greater than 5,000; density greater than 400 persons per square kilometre; and at least 75 per cent of the male main workforce is engaged in non-agricultural pursuits.

⁴ The number of Census Towns increased from 1,362 in 2001 to 3,894 in 2011 (Pradhan, 2013).

existing cities. This model of growth draws heavily on the successes of other East Asian countries such as China and South Korea where particular zones were developed to facilitate export-oriented industrialisation.

In the Indian case, this includes the development of Special Economic Zones (SEZs), National Investment and Manufacturing Zones (NIMZs), and new towns that focus on specific types of industrial and economic activities. More recently, the focus has shifted from SEZ development towards the creation of industrial corridors. The industrial corridor development policy, while primarily focused on building manufacturing and industrial centres, is the first time that the Government of India has explicitly attempted to link economic and industrial development to urbanisation (Anand and Sami, 2014).

As these new spaces of production (Brenner, 2004) emerge, challenges of governance, planning and policy arise with them. These spaces are often created through industrial policy mechanisms and governed by various industrial and economic agencies, instead of being governed as urban areas with elected local governments according to the provisions of the 74th Constitutional Amendment (CAA). As Indian policymakers prepare for an urban transition that is industry- and services-led, they increasingly believe that this transition will be driven by these settlements that lie outside existing urban centres and outside the purview of existing arrangements for urban governance as well as government schemes and programmes targeting cities. Consequently, these settlements function as spaces of exception, economically (Ong, 2006), as well as in terms of governance, and there is little thought given to the implications of the transformation of these newer spaces into more urban-like settlements.

The development of new economic settlements like SEZs, NIMZs, and industrial townships is one way of addressing the question of growth and job creation. However, while this may be an attractive strategy, there are certain limitations to the feasibility of such an approach. Any such strategy needs to take into account the current and projected economic and demographic reality of India: data shows that

most of the Indian urban economy is concentrated in small enterprises or in the informal services sector (Anand et al., 2014b). The development of integrated industrial corridors offers a potential opportunity to leverage this in order to integrate new, emerging settlements with existing economic and urban centres. These types of emerging settlements and the policies associated with them are especially interesting because they display urban-like characteristics but are not currently governed as such. As the Indian government invests in developing such policy, it becomes important to understand the implications of the growth of such settlements.

The data for this paper come from primary and secondary sources. Primary data were collected through semi-structured interviews with a wide range of stakeholders. Interviews were conducted in Vadodara, Ahmedabad, Gandhinagar, Jaipur, and Delhi. We interviewed government officials at municipal corporations, urban development authorities, industry development corporations, investment promotion bodies, consultants, industry associations, industry and real estate developers, real estate brokers, urban planners, academics, journalists and citizens. The interviews helped us understand the process of urbanization, industrialization and planning. They also helped us gauge perceptions of the different stakeholders on the growth and urbanization process in their city and state. However, since several of our respondents spoke to us under conditions of anonymity, they are not identified or directly quoted in the text below.

Secondary data came from literature on the DMIC and similar corridors and the policy, legal and organizational frameworks within which such a programme functions. We also studied the various reports on the planning and implementation of the DMIC. We looked at similar initiatives in other countries and their impacts on the economy. We have also been tracking the DMIC in various media to see its progress over the years, since its commencement.

The paper is organised as follows. Section 2 lays out the policy and institutional environment within which these instruments have emerged, and are governed and

managed. We examine both the urban and industrial policy environment, discussing the details of both the SEZ policy as well as the newer industrial corridors. Section 3 deals with the governance and politics surrounding the development of the corridors, specifically the DMIC. Section 4 focuses on the assumptions, risks, and adaptability issues with the implementation of these policies in the Indian context.

2. Policy and Institutional Environment

This section analyses the current policy and institutional arrangements for urban as well as industrial policy governing the types of economic settlements referred to above. This is not intended to be a comprehensive review of urban policy or industrial policy, but rather focuses on those aspects that are relevant to the creation of new economic settlements and their implications for India's urban future.

The executive branch of government at both state and national levels is organised into line ministries, each of which is responsible for a particular sector or area. In the case of industrial and economic planning, the responsibilities are shared by the Ministry of Finance and the Department of Commerce and the Department of Industrial Policy and Promotion, both housed within the Ministry of Commerce and Industry. However, while there is potential overlap in planning and development of regions with other ministries such as the Ministry of Urban Development, there is little actual coordination between these. Consequently, policies are often implemented in isolation.

While urban policy is largely directed by state governments, parastatal agencies, and urban local bodies (ULBs), the central government continues to exert considerable control over policy priorities and expenditure through centrally sponsored schemes, programmes, and missions. State governments are responsible for constituting municipal governments, approving master plans, and through their parastatal bodies, they also plan and finance urban infrastructure, housing, and

transport. Urban local bodies are responsible for implementing plans and programmes as directed by higher levels of government, and carrying out municipal and administrative functions. However, this is despite the devolution of a wider set of functions and responsibilities through the 74th Constitutional Amendment Act (CAA), which emphasised decentralisation and mandated the devolution of power to elected ULBs enabling them to function as the democratically elected third tier of government. In practice, however, city governments continue to play a limited role over these expanded functions, partly due to the fact that the allocation of functions and devolution of powers was left to the discretion of state governments (Sami, 2012).

Despite shifts in urban policy and funding, a significant proportion of urban residents experience high levels of deprivation. Indian cities continue to suffer from fragmented governance arrangements, poor levels of infrastructure and services, and lack adequate employment opportunities. The latter is related to the fact that India's economic growth has been capital and skill intensive, and one of the recurring goals of the Five-Year Plans has been focused on promoting industrial growth in order to generate employment.

While there are aspects of industrial development that are controlled by the central government, including transportation infrastructure, and income and corporate taxation, much about industrial development trajectories is determined at the state level. States are responsible for land acquisition, and planning and providing industrial infrastructure through parastatal agencies at the local level. However, there are certain instruments adopted by the central government such as industrial corridors, where the overall planning and vision comes from the national government, while implementation of projects rests with the states. Although this paper focuses primarily on industrial corridors, we briefly discuss SEZs below since these were the precursors to the industrial corridors.

2.1. Special Economic Zones (SEZs)

The Government of India announced the SEZ Policy in 2000, which was followed by the passage of the SEZ Act in 2005. The main objectives of the Act were to attract domestic and foreign investment, promote exports, create employment, and develop infrastructure. The assumption was that SEZs would act as engines of growth by triggering a large flow of investment for building infrastructure and productive capacity, 'leading to generation of additional economic activity and employment opportunities' (Government of India, 2009). As of 2014, there are 196 operational SEZs in India (*ibid.*). While particular instances of SEZs have been successful, on the whole, they did not generate the anticipated levels of output, investment, exports, and employment.

The performance of SEZs has been critiqued by observers for multiple reasons. First, the revenue loss to the exchequer arising from tax exemptions and incentives to SEZs has not led to commensurate gains in economic activity, employment generation and investment that were predicted by the government (Comptroller and Auditor General of India, 2014). Secondly, land acquisition for SEZs has led to the loss of land used by marginalised communities for cultivation or as common grazing land (Banerjee-Guha, 2008). Moreover, the ownership of land has been transferred to private developers, and there have been several irregularities in the use of this land with not all of it being put to its stated use; a recent report of the Comptroller and Auditor General of India highlights specific instances of land being used by developers to raise finance or for purposes other than those approved in the SEZ application (Comptroller and Auditor General of India, 2014). The third concern has been that of balanced regional development and employment generation. Critics argue that the policy has the potential to worsen trajectories of inequality by concentrating development further in coastal and already industrialised regions. Moreover, recent data on SEZ approvals shows that about 60 per cent of the 388 notified SEZs as of April 2014 are in the IT/ITeS sector with limited employment-generation potential (Banerjee-Guha, 2008), and

there are only 16 notified multi-product SEZs, which did not lead to the generation of additional economic activity or employment, nor did they help with diversification of economic activity into manufacturing (Mukhopadhyay and Pradhan, 2009a).

Several different reasons have been put forward for the inability of the SEZ policy to achieve its stated objectives: difficulties with land acquisition, and the relative openness of the rest of the economy, and the fact that private developers were unable to finance projects at this scale because they did not get preferential borrowing rates from banks (J. Bhagwati in Palit and Bhattacharjee, 2008; CUTS International, 2007). The new industrial corridor policy that successive Indian governments have proposed seems to be an attempt to deal with some of these issues.

2.2. Industrial Corridors

The current push to develop industrial corridors follows earlier policies like the development of the Golden Quadrilateral and the North-South and East-West corridors. These industrial corridors are being planned around the Dedicated Rail Freight Corridors (DFCs) that are being developed by the Ministry of Railways. However, unlike SEZs, the corridor policy is relatively recent and therefore there is limited evidence about the impact, since most projects are currently in planning or implementation stage.

An early example of the industrial corridors is the Delhi-Mumbai Industrial Corridor (DMIC). Building on the DMIC experience, the Government of India is planning other similar corridors between Mumbai and Bangalore, Bangalore and Chennai, Amritsar and Kolkata, and the East Coast Economic Corridor. However, these are still in early stages of planning. Both the freight corridors as well as the industrial corridors have attracted a significant amount of international investment from agencies such as the World Bank, the Government of Japan, and the Government of the United Kingdom.

Similar to the SEZs, the development of these industrial corridors has multiple stated goals, which include improving infrastructure, enabling exports, generating employment, and linking fast-growing regions to relatively poorer regions. While there are several similarities with the SEZs, the industrial corridor policy does have some key differences. First, although the state governments and their agencies carried out land acquisition for both the SEZs and the corridors, for SEZs, the ownership of the land was transferred to private developers while this is not the case with industrial corridors. The responsibility for planning, selection of locations, and the development of these corridors lies with the governments (even if they hire private consultants to assist with planning), whereas in the SEZ case, private developers took on the responsibility of planning, financing, and building the zones.

Second, the industrial corridors are making an explicit effort to provide connectivity to surrounding regions through the corridor itself as well as by building feeder road and rail networks. Third, the corridor policy is attempting to explicitly link industrial policy and urbanisation by developing industrial townships. A preliminary study of select locations along the DMIC shows that the planning of special investment regions (SIRs) is different from that of SEZs: unlike the SEZs, there is no requirement for SIRs to be built on contiguous land, which implies that the SIR plans incorporate existing villages and do not need to acquire land from the farmers in some cases. In addition, the SIRs are being built in a phased manner, which allows the government to experiment with the viability of such a region before building the entire infrastructure required.

Both the SEZ policy as well as the industrial corridor policy are inspired by a model of export-oriented industrialisation building on the East Asian experience. However, the particular type of development that such policy aims to promote does not reflect the economic and urban reality of India. India's urbanization during the past decade has been driven by the emergence of a large number of smaller, more dispersed settlements and not by metropolitan expansion (Denis et al., 2012a). The

economy is dominated by the services sector, while most of the employment in the manufacturing sector is concentrated in small, informal enterprises. Through this focus on developing greenfield industrial cities, the state is simultaneously ignoring the tremendous infrastructure requirements of its existing small and medium towns as well as pushing a model of capital intensive growth which will fail to meet its employment objectives in the medium and long term. The next section is a detailed discussion of the planning and governing arrangements for the DMIC followed by an analysis of assumptions underlying these policies and their relevance in the Indian context.

3. Planning and governing the DMIC

Building on primary research along the DMIC, two key issues have emerged around questions of governance and planning of the corridor: the first is a disconnect between industrial planning and urban planning. Despite the urban implications of the industrial corridor policy, our fieldwork has shown that in the context of the DMIC, this project is being largely planned and managed by industrial and economic development agencies. The industrial and urban policies around this corridor are largely being developed independently. This is particularly true at the city level. The second issue is that of coordination between the various levels of government. While state and central government agencies are working closely together, there is less coordination between the state and the city governments. Given the importance stated in the policy itself about linking urbanisation and industrialization as well as urban governance reforms that mandate increased decentralization, the involvement of existing urban local governments takes on a new importance.

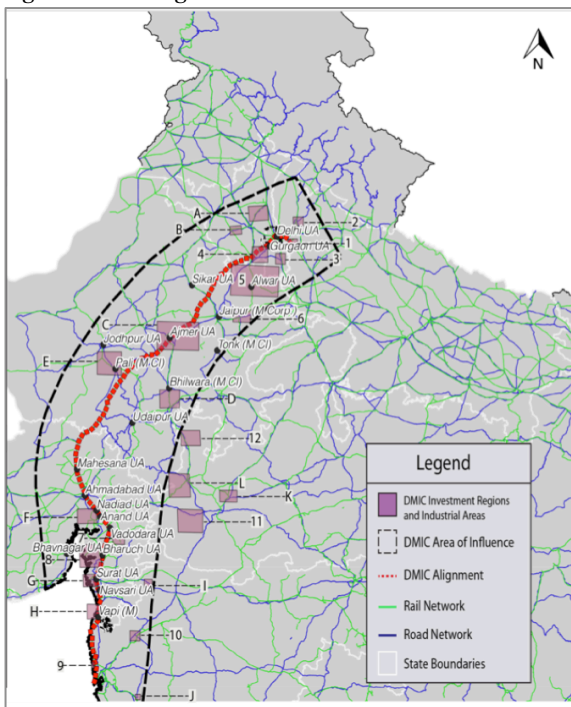
We find that there is a lot more coordination between state-level agencies and the central government agencies than between the state and city agencies. Moreover, while most of the decision-making is taking place at the level of the state government, most of the impact of the development of the corridor is being felt at

the local level where government agencies and other stakeholders have little power to act. Our research also shows that non-state actors like consultants are now formally part of the planning process and are playing an increasingly important role in facilitating coordination between various levels of government, and between different agencies.

3.1. Building the Delhi-Mumbai Industrial Corridor

In this section we focus particularly on the development and planning experiences of the DMIC. The DMIC and its experiences will also be used as a model for the development of the other industrial corridors, making this very relevant for future policy as well.

Figure 2: The alignment of the DMIC



Source: (Department of Industrial Policy & Promotion, 2014)

As Figure 2 shows, the DMIC is being planned using the 1,483 km-long high-capacity Western Dedicated Freight Corridor (DFC) as the spine. The corridor will span six states: Uttar Pradesh, Haryana, Rajasthan, Madhya Pradesh, Gujarat and Maharashtra. The development plan includes the creation of manufacturing cities,

logistic hubs, and residential townships along the Western DFC that will promote manufacturing-led economic growth (Department of Industrial Policy and Promotion, 2014). The plan also includes the development of industrial areas and investment regions along the corridor like the planned Special Investment Region of Dholera in Gujarat. A total of 24 new cities are being planned as part of the DMIC project, with seven of these planned for Phase I of development.

The conceptualisation of the DMIC seems to have originated from two circumstances. The first was the decision of the Government of India in the mid-2000s to construct a Dedicated Freight Corridor (DFC) connecting the cities of Delhi and Mumbai, as part of a bigger project to build a national-level freight corridor network (Dedicated Freight Corridor Corporation of India, 2013). The second is the international experience of industrial corridors and megalopolises as drivers of growth and employment, in particular the Japanese Taiheiyo Belt running roughly from Tokyo to Osaka (also known as the ‘Pacific Belt’ or ‘The *Tokaido* Corridor’) (Nikkei Asian Review, 2014; Sanjai, 2013; Mangaonkar, 2009; Dhaliwal, 2008; The Hindu, 2007).

The Delhi-Mumbai Industrial Corridor Development Corporation (DMICDC), created in 2007, is the nodal agency responsible for the execution of the DMIC project at the national level. It is a Special Purpose Vehicle (SPV) constituted as a public corporation with the Government of India represented by the Department of Industrial Policy and Promotion (DIPP), as the single largest shareholder (with a stake of 49%).⁵ Other shareholders include the Japan Bank for International Cooperation or JBIC (26%), the Housing and Urban Development Corporation Ltd or HUDCO (19.9%), the India Infrastructure Finance Company Ltd or IIFCL (4.1%)

⁵ The DIPP was established in 1995 and is responsible for the formulation and implementation of promotional and developmental measures for growth of the industrial sector, keeping in view national priorities and socio-economic objectives. The DIPP is responsible for the overall Industrial Policy while individual Administrative Ministries look after the production, distribution, development and planning aspects of specific industries allocated to them.

and the Life Insurance Corporation of India or LIC (1%) (Delhi-Mumbai Industrial Corridor Development Corporation, 2014).

Despite the urban rhetoric of the industrial corridor policy, our fieldwork has shown that in the context of the DMIC, this project is being largely planned and managed by industrial and economic development agencies. The disconnect operates at two levels: across scales and across sectors. Across sectors, at the state government level, there is little coordination between the industrial departments that are planning and executing projects and the urban development departments. An important caveat here is that the Rajasthan state government has been more proactive about taking inputs from the urban development department. Across scales, while there is close cooperation between the national and state governments, there is little coordination between state and city governments regarding this project. Most of the decision-making is taking place at the level of the state government, even though the project will have significant impacts at the local level where government agencies and other stakeholders have little power to act.

3.2. Planning and governance at different scales

While the DMICDC is the nationwide nodal agency for the DMIC, the overall institutional framework for the project's execution is much more complex. The DMIC's Project Influence Area covers major portions of seven states (some of which are the largest states in the country in terms of both size and population). This fact, combined with the federal nature of India's governance structure (which devolves several powers and functions to state governments), implies a large number of stakeholders spanning several regions that the DMICDC is required to engage with.

Each state has evolved specific mechanisms to implement DMIC projects within its jurisdictions. The management of the project at the state level is undertaken by nodal agencies, the Gujarat Infrastructure Development Board in Gujarat, and the Bureau of Investment Promotion in Rajasthan. Our research work in Gujarat and

Rajasthan showed that such mechanisms typically involve the state nodal agency engaging with a variety of governmental and non-governmental actors to carry out particular functions and execute specific projects. However, although the individual state governments play an important role in land acquisition, and the provision of some industrial infrastructure, the DMIC is essentially a centrally conceptualized and financed project. The central government also provides transportation infrastructure through the Ministry of Railways, thereby enabling connectivity between the nodes. In addition, as we learned through our interviews, state government agencies have also received central assistance for the planning of these projects through consultants that are hired and paid for by the DMICDC.

While the coordination mechanism between the central government and its agencies, particularly the DMICDC, and the state governments, has been worked out in detail in the DMIC policy documents, the third tier of government (i.e. at the local/city level) has largely been ignored. This was also reflected in the responses of different actors: while the central and state level agency representatives we interviewed had very similar responses to our questions about the planning of the DMIC, the selection of sites for investment, the project influence area, the phasing, and other questions related to the operationalization of the DMIC; the city level planning agencies had little awareness about the plans for the DMIC. Their perceptions of the plans were often very different from those stated by the central and state level agencies.

In addition, Vadodara was in the process of preparing its 20-year Master Plan and obtaining approval from the state government when the DMIC was announced in 2007. Despite the fact that city planning officials were aware of the DMIC, a megaproject which is likely to impact the city significantly given its proximity to the Delhi-Mumbai national highway, to one of the proposed industrial areas as well as to an interchange location between road and rail for the DMIC, they had not altered their Master Plan in any way to incorporate any potential additional growth arising from the corridor and its related investments. Part of this disconnect stems from

the absence of any framework governing coordination between state governments and existing cities, even though these are likely to experience significant impacts. In contrast, our interviews revealed that the Rajasthan state government had formulated a plan for the Khushkera-Bhiwadi-Neemrana region (KBNIR), but altered this plan after the announcement of the DMIC to incorporate some changes. However, the city of Jodhpur had an experience similar to the city of Vadodara – they had little information about the DMIC and were not reviewing their Master Plan.

There are multiple possible explanations for this. One possible explanation could be due to the fact that the new institutional frameworks established in the state of Gujarat for DMIC implementation are focusing to a greater extent on greenfield projects such as Dholera. In doing so, they are neglecting the impacts on existing cities which themselves are not equipped to alter their plans given their limited knowledge about the project and its timelines. In addition, the planning and implementation of the DMIC is largely taking place through the institutions of industrial planning, rather than urban development, which is why the urban development ministry at the state level, as well as city governments, are only involved in a very limited way. This disconnect is dealt with in greater detail below.

Another possible explanation relates to a general failure of urban planning in Indian cities: that it is often reactive and not proactive (Weinstein et al., 2013; Sami, 2012; Roy, 2009). Master Plans are formulated based on simple population projections based on past trends, and do not take infrastructure projects or future potential for industrial growth into account. This is partly due to the fact that these projects are planned by higher levels of government such as state or national level agencies, without taking local governments into account. Moreover, infrastructure projects such as highways, railways, or even industrial parks are planned by different ministries that do not coordinate with the ministry for urban development.

3.3. Planning and governance across different sectors

The implementation frameworks at the state level have some similarities with those of the Centre. In both Gujarat and Rajasthan, the responsibility of developing the DMIC rests with government bodies concerned with commerce and industry that in turn carry out these responsibilities through specific, government-controlled agencies such as the Gujarat Infrastructure Development Board (GIDB) and the (Rajasthan) Bureau of Investment Promotion (BIP). As is the case in several Indian states, these agencies were incorporated to perform several functions related to the promotion of industrial and commercial growth within their respective states and need not necessarily be confined to the implementation of DMIC-related projects.

However, it must also be noted that while these government departments are vested with the general responsibilities of executing the DMIC within their states, they in turn have formed (or are in the process of forming) specialised agencies, which are singularly focused on tasks related to the DMIC. Therefore, departments like the GIDB function as supervising bodies for the DMIC in the state while the DMIC-specific agencies carry out more specific tasks. In Gujarat, the specialised agency is the Gujarat Industrial Corridor Corporation or GICC. It has several designated functions, all pertaining to the development of the DMIC in Gujarat, including the establishment of industrial corridors, investment regions, industrial areas, economic regions, industrial nodes, SEZs and townships as well as integrated infrastructure for the same (Gujarat Industrial Corridor Corporation Limited, 2014).

The Rajasthan government is considering the establishment of a similar body with a singular focus on the implementation of DMIC-related projects. However, unlike in Gujarat, this new agency is not expected to function under the aegis of an entity such as the BIP but report directly to the Rajasthan Urban Development Minister and derive its mandate from a special government act. At the time of writing, it had

not yet been confirmed if this new agency had been incorporated or if the state government had passed such an act.

Thus, even though there are similarities in legal frameworks between the states and between the centre and the state, there are a few significant differences to note. Firstly, if Rajasthan does incorporate a new agency directly under the urban development minister, it will denote an expansion of focus from the original vision of the DMIC as a site and facilitator of industry to becoming a site and facilitator of urbanisation as well, with the urban development ministry playing a significant role in its development. Furthermore, (if this is implemented) direct accountability to a state cabinet minister also signals a prioritisation of the DMIC in Rajasthan.

In contrast, while the constitution of the GICC in Gujarat also signals a prioritisation of the DMIC, the state has chosen to place it under the GIDB, signaling intent to continue working on the DMIC through its industrial policies and institutions. This doesn't necessarily imply a lack of focus on urbanisation but it seems to signal that urbanisation processes, if any, will be managed through its industrial institutions and frameworks for the time being. This is further borne out in the Gujarat Special Investment Region (SIR) Act of 2009, which, while allowing for the establishment of Regional Development Authorities or RDAs for developing specific nodes such as Dholera, also appoints the GIDB as the apex authority for SIRs in the state.⁶

Therefore, while the initial policy documents for the DMIC state the importance of integrating industrial growth with urbanization, much of the planning of DMIC-related projects is being managed by the institutions responsible for industrial planning and governance, with little coordination between either the state ministries of urban development or urban local bodies. An important caveat is in order: there is some level of inter-state variation in this, with the Rajasthan state government considering the possibility of setting up an institutional mechanism

⁶ Dholera is a greenfield industrial development site in Gujarat that has been planned for the first phase of the DMIC.

that will bring urban development to the forefront. The stated intention of linking industrialization to urbanization takes on a slightly different tone with the new government, as the agenda for urban development is now focused on the development of ‘smart cities’. In the context of the DMIC in Gujarat, this is taken to mean the greenfield site of Dholera, which has now been declared a smart city. The focus on greenfield locations bypasses the problems of coordinating between industrial plans and existing urban locations, but such projects are difficult to execute.

3.4. Challenges with governance and planning

India has a three-tiered government system: the national or the federal-level government, followed by the state or regional-level government and finally city or municipal-level government. However, the third tier of government has been relatively weak in the early decades of newly independent India. Acknowledging this issue, the Parliament passed the 73rd and 74th amendments to the Indian constitution in 1992 that required decentralisation of government and decision-making. These constitutional amendments enable both local rural and urban governments to take decisions with regard to their jurisdictions. However, there are few incentives offered to state governments to implement the reforms, or indeed few negative repercussions of not implementing them (Sami, 2012). The Government of India attempted to link the implementation of urban reform with financial incentives through the JNNURM programme, however this too did not succeed.

In spite of legislation that requires decentralisation of governmental authority at the local level, state governments, and the parastatal bodies that they appoint, continue to control most of the decision-making processes with little or no input from municipal governments (Baud and de Wit, 2008). The governmental reaction to a rapidly weakening municipal management structure was to attempt to find substitutes for municipal institutions, often in the form of development authorities (Buch, 1987). These developmental authorities are parastatal statutory institutions

responsible for the developmental aspects of planning in urban settlements, while maintenance and service provision is left to the elected municipal councils.

In an extension of this trend, the newer forms of economic settlements like SEZs, industrial townships, and large SIRs along industrial corridors are emerging as spaces of exception (Ong, 2006) where the usual norms and legislations that apply in most other urban settlements are relaxed to a certain degree. These spaces are being planned and governed by specially created institutions like development authorities established under Article 243Q of the 74th CAA, which provides an exception for the establishment of locally elected bodies for areas designated as industrial townships. While there is always the possibility that these new urban-like economic spaces may one day have an elected government, it is important to ensure that their residents have access to and are governed by the same set of policies and laws as other urban settlements. It is also important to recognize that the transition to elected local government becomes difficult, as development authorities create their own domains of power and are unwilling to cede these to newer institutions, as amply witnessed in the case of Bangalore (Sami, 2013).

Another area of concern is the setting up of new institutions for managing projects, bypassing the current institutional structure. While this might be expedient in the short run and enable state government to push through new forms of financing or partnering with the private sector, however, in the long run it can lead to fragmentation and weakening of institutions. Our research also shows that non-state actors like consultants are now formally part of the planning process and are playing an increasingly important role in facilitating coordination between various levels of government, and between different agencies.

4. Assumptions, feasibility, and adaptability

The establishment of settlements and zones to promote industry-led growth and decongest cities is based on certain assumptions regarding the feasibility of these types of policies and their projected outcomes and economic goals, which include

export-oriented industrialisation and employment generation. It is important to critically analyse these trends since DMIC will act as a precedent to the other industrial corridors which are being planned across the country like the proposed Amritsar Kolkata Industrial Corridor. We discuss these below.

4.1. Export Oriented Industrialisation

The DMIC's focus is explicitly on manufacturing, though the infrastructure that will develop as part of it is expected to have spillover effects for other sectors like services as well. With the globalisation of manufacturing, studies suggest that it is necessary for emerging economies to adapt to the export oriented manufacturing strategy to make inroads into global value chains and to increase productivity (The Economist, 2015). India's strategy to improve productivity in manufacturing seems to be influenced by the East Asian model of export led industrialisation. The East Asian model focused on bringing in foreign direct investment through the establishment of spaces like SEZs which offer tax subsidies and other incentives to manufacturers (Anand et al., 2015) along with, *inter alia*, developing export friendly exchange rate regimes.

In India, the SEZ policy was developed to encourage investment from the private sector, by providing incentives to private developers to establish industrial enclaves. This policy however, was found to be inadequate given the high up-front costs of acquiring land, and building industrial and transport infrastructure. The corridor policy along with the establishment of SIRs, influenced by Japan's industrial corridors appears to have evolved from this model. In the corridor model, the state assumes a more prominent role in providing transportation infrastructure, and the assumption is that increased transport connectivity, augmented by industrial cities and SIRs, will help boost exports by reducing the delays currently faced by the export sector in the country.

There are a few pressing issues with this model of industrial growth, one being the feasibility of the export oriented strategy of the government and its

applicability to the current Indian and global economic context. There is growing evidence to support the fact that manufacturing shares are declining in employment as well as output in many developing countries including India (Rodrik, 2015b; Felipe et al., 2014). There has been a trend of premature deindustrialisation in developing countries where there is a lessening amount of specialisation in manufacturing, increasing automation and lesser amounts of labour allocated (Rodrik, 2015b). Another trend that has been observed is increased capital flows to smaller manufacturing economies like Bangladesh and Vietnam, over emerging countries like India, given their competitive advantages like lower labour costs (Rodrik, 2015a). Also, while growth rates of East Asian manufacturing, especially China, have fallen marginally, they still produce a large proportion of the world's goods and their share is not expected to fall in the near future (The Economist, 2015).

Keeping these trends in mind, export led growth might not work out as well for developing countries now as it did for the South East Asian nations in the 1970s or for China since the late 90s because of slowing global demand. However, manufacturing for domestic demand holds promise, though the strategies that would need to be followed for this are very different and would involve lowering of internal barriers (Rajan, 2014). SEZs in India have had a poor performance over the last decade in facilitating industrialisation (See (Anand et al., 2014a) for a more detailed critique of the SEZ model). 63.5% of the SEZs that were set up were in the IT-ITeS sector, 9.5% in the existing export sectors leaving only 27% of the SEZs to promote new export sectors (Mukhopadhyay and Pradhan, 2009b). In Gujarat itself, the SEZ model has not seen much success. In 2009-10, almost 80% of Gujarat's SEZ exports came from a single SEZ (Mukhopadhyay et al., 2014). SEZs were a failure in Rajasthan as well with the allocated land being denotified and returned to the original land owners, as we found out through interviews. The failure of SEZs in both states, Gujarat and Rajasthan, and in other parts of the country acts as a warning to the possible fate of the proposed investment regions. To some extent, the provision of

transport and other supporting infrastructure might facilitate industrialization in a way that the SEZ policy was unable to do, however, a greater focus.

4.2. Implications for employment generation

The second issue is about the mix of industries being promoted by this set of policies. The rationale behind an industrial policy of this kind is to increase productivity of the manufacturing sector by inviting medium and large industries which have higher levels of productivity as compared to micro and small firms (Bloom et al., 2014). However, large firms in India employ very low numbers of people, with 84 per cent the workforce in the industrial sector being concentrated in enterprises with less than 50 workers (Hasan and Jandoc, 2010). Currently, MSMEs make up most of the industries in the country, and also in the Jodhpur-Pali region in Rajasthan.

As mentioned earlier, state governments aspire to invite high value, capital intensive manufacturing firms to set up shop in the SIRs along with other industries, in order to boost productivity. Further research is required to understand the implications of this strategy for the already existing industries in these areas which are dominated by MSMEs (especially in the case of Jodhpur-Pali-Marwar), for employment and for the traditional economies of the regions.

A key issue of interest will be the effect of the corridor on these industries and on those employed in the MSMEs. In Rajasthan, the Jodhpur-Pali-Marwar (JPM) node has a large number of micro, small and medium enterprises which are the backbone of the region's economy and the main source of industrial employment. On one hand, the corridor could help increase synergies between the existing and new industries and increase the dynamism of the region. Proximity to transportation networks could allow smaller manufacturing hubs to reach out to new and bigger export markets more efficiently and allow them access to new resource networks, as in the case of the Jodhpur-Pali-Marwar node.

On the other hand, if the new industries which get set up in the SIRs are very different in nature from the existing industrial ecosystem-if the industries are highly capital intensive and are closed in nature without depending on the existing firms, it could result in a significant amount of unemployment. Achieving a sustainable mix of industries will be necessary to offset these changes.

One of the reasons offered for the low employment generation potential of the industrial sector has been cumbersome labour regulations (Panagariya, 2008). Even though the SEZ policy was expected to improve employment, the job generation record was dismal. According to a CAG report, SEZs fell short of their targets for employment generation by about 90% (Comptroller and Auditor General of India, 2014). To address this concern, labour reforms have been announced in both the states being studied here. The reforms in Rajasthan allow firms more flexibility in hiring and firing by waiving of compulsory and prior approval from the government before layoffs, retrenchment and closure of industrial establishments employing more than 100 workers along with changes in terms of contractual labour and work hours among other changes (Mallet, 2015; Sahoo, 2014). Gujarat too, which is lauded for having industry friendly labour laws, has formalised the passage of similar reforms (Vishwa Gujarat, 2015).

While governments are easing labour regulations to facilitate industrialisation in their respective states, it is too early to assess the impacts of these policies on employment trends in the region. Whether the SIRs will cause unemployment and whether they will absorb the displaced labour is unclear. The DMIC Concept Paper (Department of Industrial Policy and Promotion, 2007) emphasises on development of skill centres to equip job seekers, especially from acquired regions, to gain employment in the upcoming industries.

However, as we found out in our interviews with officials in both states, a large part of industrial labour comes from other states and not from within the state,

especially in the case of Gujarat. A critical challenge will be the ability of government agencies to accommodate the transition that is happening from traditional agricultural occupations of residents to non-agricultural occupations in anticipation of industrial development. In case of Dholera, which is a greenfield site, it is unclear whether the occupants of the acquired villages will be absorbed into workforce once the industries come in. Further research is necessary to understand the impact of the corridor on employment patterns.

The government has introduced schemes to promote MSMEs like the MUDRA bank which aims to provide funding to these enterprises. Skill development has also been taken seriously by the current government with the forthcoming launch of the National Skill India programme. In order to meet the employment goals of the DMIC, the national and the state governments will need to work with the private sector to create a sustainable industrial mix and provide adequate skills to aid the transition from traditional occupations to industry.

4.3. Regional disparities

Gujarat and Rajasthan are vastly different in terms of levels of economic development and complexity of governance mechanisms. Gujarat has been lauded for its model of development which promoted large scale industrialisation of the state. Gujarat has historically been a fairly industrialised state and has mechanisms in place. The state makes use of the Town Planning Schemes for land acquisition; the Gujarat Industrial Development Corporation (GIDC) has developed industrial infrastructure in Gujarat on a large scale and has assisted in diversifying the industrial base in the state; Gujarat is also the first state in the country to come up with the SIR Act. Rajasthan, once part of the BIMARU states, on the other hand, has lower levels on economic development and has a relatively weaker industrial base which is dependent on its abundant mineral wealth. However, industrial growth in the state has been rising. Keeping in mind the varying capacities and historical growth trajectories of individual states, the policy is expected to affect each state differently even

though one of its stated aims to connect leading regions to lagging regions and promote regional development.

While the corridor policy is a centrally led policy, states have to compete to attract industries by framing industrial friendly policies. Environmental, labour and land acquisition regulations among others are enforced differently in different states in order to increase competitiveness. Gujarat being highly developed and being a preferred destination for industries can enforce pollution control norms strictly and allow the setting up of mostly non polluting industrial units in its SIRs; Rajasthan has lesser incentive to enforce such strict regulations in order to attract new industries and retain the ones that show interest in setting up establishments in the state. In order to avoid these disparities, the centre will have to enforce regulations uniformly across all the states. The central government may have to play a more proactive role in order to enable states to leverage this investment and not worsen inter-state disparities.

5. Conclusion

This paper examines the governance and planning arrangements along the Delhi-Mumbai Industrial Corridor. We found that while the national and state governments were well aligned, there was little coordination between the state and local governments regarding the planning and development of the DMIC. Moreover, we found that the entire process of corridor development was in the hands of the Ministry of Commerce and Industry and its agencies, with little involvement from the Ministry of Urban Development or its agencies. Urbanization, therefore, featured only as a by-product of this process, and the main focus was on developing new industrial and manufacturing centres.

Further, these new centres are being developed away from existing cities, and under 243Q, an exclusion to the 74th Constitutional Amendment which allows them

to be established by a development authority, and without an elected local government. A few important caveats should be added here. Firstly, the move away from existing settlements may also have been motivated by factors other than regional development and our interviews brought out implications of several such issues. For instance, the acquisition of land for development can be much more difficult in existing settlements in terms of both supply and cost – there may not be enough available land for projects and available land may have high acquisition costs.

Secondly, existing settlements are also governed by a number of planning processes, laws, rules and regulations that may hinder or prohibit certain activities envisioned in the DMIC nodes. For instance, a 1996 Supreme Court ruling directed certain hazardous or polluting factories located in Delhi to cease operations and relocate outside the city, specifically stating that their continuing presence was not in consonance with the Delhi Master Plan.⁷ The presence of master plans and zoning laws, urban local bodies and most importantly, high levels of existing human habitation may often entail higher costs for industrial planning and development in existing cities. This in turn may make the move away from existing settlements attractive, particularly to regions governed by an authority such as the RDA that has relative freedom to formulate its own rules and regulations that can suit industrial and economic requirements (though the SIR law requires some forms of adherence to existing town planning laws). However, as discussed earlier, the setting up of these development authorities makes it difficult to transition to elected local government, and can lead to fragmentation as witnessed in the case of Bangalore (Sami, 2013).

In some senses, this is not new in post-independence India. Several towns and cities post-independence were built with considerations of industry in mind such as the steel towns of Bhilai and Bokaro. The country's Special Economic Zone (SEZ)

⁷ Reference: 1996 SCC (4) 750 (Link: <http://judis.nic.in/supremecourt/imgst.aspx?filename=15490>)

policies in the late 1990s can also be thought of as a precursor to the trends of industrial corridors and investment regions where large spaces with integrated infrastructure were created away from existing settlements to encourage industrial production within the country.

However, industrial corridors introduce some new aspects to these trends of industry-led development. The industrial corridor reiterates the growing prominence of the special purpose vehicle and public (and public-private) corporations such as the DMICDC and GICC in facilitating large-scale development in the country, which is a significant shift from the model of the steel towns built in the 1960s. Over the years, SPVs and PPPs have dramatically gained prominence, becoming important actors in governance structures across various scales and levels ranging from local initiatives to large-scale projects of national importance. Such bodies are likely to continue playing critical roles in urban, industrial and economic development in the country, thereby requiring more conventional actors such as municipal corporations or state government departments to regularly engage in creating, coordinating, and working with these actors.

The implementation of a project of this scale has implications for multiple sectors and across different scales. New planning and governance mechanisms are being set up that do not take representative democracy into account at this point in time; land acquisition, compensation, resettlement and rehabilitation remain challenges; and there are repercussions for the kind of manufacturing and employment that these new areas will generate.

References

- Aijaz, R. 2008. Form of Urban Local Government in India. *Journal of Asian and African Studies*, 43 (2) (131-154)
- Anand, S., Arakali, A., Jana, A., Koduganti, J. & Sami, N. 2014a. Manufacturing cities: Industrial policy and urban growth. *IIHS-Rockefeller Working Paper Series*. Bangalore, India: The Indian Institute for Human Settlements and the Rockefeller Foundation.
- Anand, S., Arakali, A., Jana, A., Koduganti, J. & Sami, N. 2015. Manufacturing Cities: Industrial Policy and Urban Growth. *In: IIHS-RF Policy Series* (ed.). Bangalore: Indian Institute for Human Settlements
- Anand, S., Koduganti, J. & Revi, A. 2014b. Cities as Engines of Inclusive Development. *IIHS-Rockefeller Foundation Working Paper Series*. Bangalore, India: IIHS, and the Rockefeller Foundation.
- Anand, S. & Sami, N. 2014 Published. Scaling up: Land use and economic development in India's urban corridors. Proceedings of Association of Collegiate Schools of Planning, Philadelphia, PA.
- Banerjee-Guha, S. 2008. Space relations of capital and significance of new economic enclaves: SEZs in India. *Economic & Political Weekly*, 43 (47) (51-59)
- Baud, I. S. A. & de Wit, J. (eds.) 2008. *New forms of urban governance in India: Shifts, models, networks & governance*, New Delhi, Thousand Oaks, Calif; London; Singapore: Sage.
- Bloom, N., Fischer, G., Rasul, I., Rodriguez-Clare, A., Suri, T., Udry, C., Verhoogen, E., Woodruff, C. & Zane, G. 2014. Evidence Paper: Firm Capabilities and Economic Growth *In: Centre, I. G.* (ed.).
- Brenner, N. 2004. *New state spaces: urban governance and the rescaling of statehood*, Oxford; New York, Oxford University Press.
- Buch, M. N. 1987. *Planning the Indian city*, New Delhi, Vikas Pub. House.
- Chandrashekhar, V. 2010. As wealth rises in India, so do private towns. *The Christian Science Monitor*, July 16, 2010.

<http://www.csmonitor.com/World/Asia-South-Central/2010/0716/As-wealth-rises-in-India-so-do-private-towns> [Accessed August 17, 2010].

Comptroller and Auditor General of India, 2014. Report of the Comptroller and Auditor General of India on Performance of Special Economic Zones (SEZs). Comptroller and Auditor General of India,, New Delhi

Corbridge, S. & Harriss, J. 2000. *Reinventing India: Liberalization, Hindu nationalism and popular democracy*, Cambridge, UK; Malden, MA, Polity Press; Blackwell.

CUTS International 2007. An Assessment of Potential Costs and Benefits of SEZs in India: A Study for the Department of Commerce, Government of India. Jaipur: CUTS International.

Dedicated Freight Corridor Corporation of India. 2013. *Background* [Online]. Available: http://www.dfccil.gov.in/dfccil_app/Background.jsp [Accessed 1st September 2014].

Delhi-Mumbai Industrial Corridor Development Corporation. 2014. *Composition of DMICDC* [Online]. Available: <http://www.dmicdc.com/cpage.aspx?pgid=5> [Accessed September 1st 2014].

Denis, E., Mukhopadhyay, P. & Z erah, M.-H. 2012a. Subaltern Urbanisation in India. *Economic and Political Weekly*, 47 (30) (52-62)

Denis, E., Mukhopadhyay, P. & Zerah, M. H. 2012b. Subaltern Urbanisation in India. *Economic and Political Weekly*, 47 (30)

Department of Industrial Policy & Promotion. 2014. *The Department of Industrial Policy & Promotion - About DMIC* [Online]. New Delhi: Government of India. Available: http://dipp.nic.in/English/Schemes/DMIC/About_DMIC.aspx [Accessed March 23 2015].

Department of Industrial Policy and Promotion, 2007. DMIC Concept Paper. Ministry of Commerce & Industry. Government of India, New Delhi

Department of Industrial Policy and Promotion. 2014. *Make in India* [Online]. New Delhi: Department of Industrial Policy and Promotion,. Available:

- <http://makeinindia.com/> [Accessed December 23, 2014; March 23, 2015 2014].
- Dhaliwal, S. 2008. Ludhiana included in industrial corridor. *The Tribune*.
<http://www.tribuneindia.com/2008/20080116/main9.htm>.
- Dupont, V. 2011. The Dream of Delhi as a Global City. *International Journal of Urban and Regional Research*, 35 (3) (533-554) Blackwell Publishing Ltd
- Felipe, J., Mehta, A. & Rhee, C. 2014. Manufacturing Matters... but It's the Jobs That Count. *In: Series, A. E. W. P. (ed.). Asian Development Bank.*
- Government of India. 2009. *Special Economic Zones in India* [Online]. Ministry of Commerce & Industry, Department of Commerce.
- Gujarat Industrial Corridor Corporation Limited, 2014. Proactive Disclosure under Right to Information Act
- Hasan, R. & Jandoc, K. R. 2010. The Distribution of Firm Size in India: What Can Survey Data Tell Us? *ADB Economics Working Paper Series*. Asian Development Bank.
- High Powered Expert Committee (HPEC) 2011. Report on Indian Urban Infrastructure and Services. New Delhi: The High Powered Expert Committee for Estimating the Investment Requirements for Urban Infrastructure Services.
- Jakobson, L. & Prakash, V. 1967. Urbanization and regional planning in India. *Urban Affairs Review*, 2 (36) (36-65)
- Mallet, V. 2015. Rajasthan spearheads India's reform drive. *Financial Times*.
<http://www.ft.com/intl/cms/s/0/89271888-a15e-11e4-8d19-00144feab7de.html - axzz3TD8hf9oY>.
- Mangaonkar, R. 2009. DMIC modelled along Tokyo-Fukuoka. *Times of India*.
<http://timesofindia.indiatimes.com/city/ahmedabad/DMIC-modelled-along-Tokyo-Fukuoka/articleshow/3929590.cms>.
- Mehta, M. & Mehta, D. 1989. Priorities in Urban Planning and National Commission on Urbanisation. *Economic and Political Weekly*, 24 (21) (1178-1184) *Economic and Political Weekly*

- Mukhopadhyay, P., Jenkins, R. & Kennedy, L. 2014. Power, Protest and India's Special Economic Zones. *Power, Policy and Protest: The politics of India's Special Economic Zones*. New Delhi: Oxford University Press.
- Mukhopadhyay, P. & Pradhan, K. C. 2009a. Location of SEZs and Policy Benefits What Does the Data Say?
- Mukhopadhyay, P. & Pradhan, K. C. 2009b. Location of SEZs and Policy Benefits What Does the Data Say? In: Centre for Policy Research (ed.) *CPR Occasional Paper Series*. New Delhi.
- Nikkei Asian Review. 2014. A Strategy of Corridors. *Hindustan Times*, 23rd January 2014. <http://asia.nikkei.com/magazine/20140123-Geared-for-success/Cover-Story/A-strategy-of-corridors>.
- Ong, A. 2006. *Neoliberalism as exception : mutations in citizenship and sovereignty*, Durham [N.C.], Duke University Press.
- Palit, A. & Bhattacharjee, S. 2008. *Special Economic Zones in India: Myths and Realities*, Anthem Press.
- Panagariya, A. 2008. *India: The emerging giant*, Oxford University Press.
- Pradhan, K. C. 2013. Unacknowledged urbanisation: The new census towns of India. *Economic & Political Weekly*, 48 (36) (43-51)
- Rajan, R. 2014. Make in India, Largely for India. New Delhi: Reserve Bank of India,.
- Rodrik, D. 2015a. Global Capital Heads for the Frontier. *Project Syndicate* [Online], Available: <http://www.project-syndicate.org/commentary/frontier-market-economy-fad-by-dani-rodrik-2015-03>.
- Rodrik, D. 2015b. Premature deindustrialisation in the developing world. *VOX - CEPR's Policy Portal* [Online], Available: <http://voxeu.org/article/premature-deindustrialiation-developing-world>.
- Roy, A. 2009. Why India Cannot Plan Its Cities: Informality, Insurgence and the Idiom of Urbanization. *Planning Theory*, 8 (1) (76-87)

- Sahoo, P. 2014. Finally, a push for labour reforms. *Business Line*.
<http://www.thehindubusinessline.com/opinion/finally-a-push-for-labour-reforms/article6528145.ece>.
- Sami, N. 2012. *Building Alliances: Power and Politics in urban India*. Doctor of Philosophy, University of Michigan.
- Sami, N. 2013. Power to the People? A study of Bangalore's urban task forces. In: Shatkin, G. (ed.) *Contesting the Indian city: Global visions and the politics of the local*. West Sussex, UK: Wiley Blackwell.
- Sanjai, P. R. 2013. Manufacturing to be key driver of industrial cities: DMICDC. *Mint*.
http://www.livemint.com/Companies/7KvIrMXwPOIyC0v4mTQZII/Amitabh-Kant--Manufacturing-will-be-the-key-economic-driver.html?utm_source=copy.
- Sankhe, S., Vittal, I., Dobbs, R., Mohan, A., Gulati, A., Ablett, J., Gupta, S., Kim, A., Paul, S., Sanghvi, A. & Sethy, G. 2010. India's urban awakening: Building inclusive cities, sustaining economic growth. McKinsey Global Institute.
- Shaw, A. 2007. Introduction. In: Shaw, A. (ed.) *Indian cities in transition*. First ed. Chennai: Orient Longman.
- Sivaramakrishnan, K. C. 1978. *Indian urban scene*, Simla, Indian Institute of Advanced Study.
- The Economist 2015. Made in China?
- The Hindu. 2007. Work on \$50 b industrial corridor to begin in January. *The Hindu*. <http://www.thehindu.com/todays-paper/tp-business/work-on-50-b-industrial-corridor-to-begin-in-january/article1828483.ece>.
- United Nations Population Fund 2007. State of the World Population 2007. United Nations Population Fund.
- Vishwa Gujarat. 2015. Gujarat Assembly: Labour Bill Passed.
<http://www.vishwagujarat.com/gujarat/gujarat-assembly-labour-bill-passed/>.
- Weinstein, L., Sami, N. & Shatkin, G. 2013. Contested Developments: Enduring Legacies and Emergent Political Actors in Contemporary Urban India. In:

Shatkin, G. (ed.) *Contesting the Indian city: Global visions and the politics of the local*. West Sussex, UK: Wiley Blackwell.