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**EMERGING SPATIAL PLANNING SYSTEMS IN THE GLOBAL SOUTH:
CASE STUDY OF INDIA**

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INTRODUCTION

This paper takes a closer look at the planning system in contemporary India. Firstly, it briefly describes the context within which the planning system has been evolving, and then it examines the key characteristics of the planning system in India and finally concludes by outlining emerging challenges facing planning practice in the country.

In industrialised societies, there is considerable clarity on the key characteristics of planning systems. For instance, there is a general consensus of who is involved and how in various aspects of planning practice such as ‘development planning’ and ‘development control’ (or management in Scotland); where the *former* refers to a process of decision making and the outcome of which, ‘a development plan’ is a spatial interpretation of the future needs and priorities of a locality (usually in the form of reports, maps etc.) with reference to existing resources and challenges, and of how and when these needs and priorities will be met; and the *latter*, refers to a system of regulation that sets out to ensure that new developments and/or changes to existing land/buildings/urban structure are coherent with the guidelines set out in the ‘development plan’.

However, the issue in the Indian context is far more elementary and greatly under-researched – the lack of clarity on the key characteristics of the planning system, drawing on which planners might engage the needs and priorities over a billion people in general and the lives of the poor and disadvantaged in particular which the World Bank (2010) estimates, make up a third of the total population. In addition to a large population, India’s cities are growing rapidly (see Fig 1) with 35 of them classified as metropolitan cities or cities with a population of over a million according to the 2001 Census (Shaw and Satish 2006).

In response, a range of research has been carried out, for instance: (1) to develop tools such as multi-temporal remote sensing to measure and monitor the levels of rapid urbanisation (Taubenbock et al. 2009); (2) to demonstrate that there is an interplay of global and local actors in shaping the nature of economic activities and the scale of investments in large urban areas in India and that this interplay has regional variations (Shaw and Satish 2006); (3) to provide an understanding of the structure of urban local governments as well as the components of local government revenue and expenditure in India following the constitutional reforms in 1992 (Aijaz 2008); to examine how urbanisation as one of many

factors affects the process of industrial location and concentration in India and thereby providing a clue as to ‘what economic activities will locate, where and why’ (Lall and Chakravorty 2005; Lall et al. 2003); to unpack the nature of urbanisation in India by particularly focussing on the urban form and its associated townscape elements, starting with the Indus valley civilisation in 2500 B.C. (Spodek 1980).

But what is not yet clear is how these rapidly growing cities in India are managed or in other words, a lack of understanding of some of the key characteristics of the planning system in contemporary India. This is not to say that the planning system in India has not been examined before – for instance, see works by Wood (1958), Routray (1993). But what these don’t offer is a clear setting out of, what I would argue, as the two key characteristics of the planning system in India: (1) that there is the central role of state governments and not central governments (with limited role for local governments) within planning practice across India; (2) as is elsewhere and particularly in the UK, that planning practice in India needs to be understood within a framework of ‘development planning’ and ‘development control’.

Before discussing these characteristics that underpin the planning system in India, this paper briefly describes how the contemporary planning system in India has evolved.

EVOLUTION OF PLANNING ACTIVITY IN INDIA

It will be a pretty ambitious task to discuss the evolution of planning activity in a country that has a ‘history of continuous urbanisation’ for over 4500 years (Spodek 1980). Consequently, the intention here is quite modest and to provide a brief outline of how planning activity in India has gone through a range of transformations in response to prevailing socio-political factors.

Research on the cities of the Harappan or Indus Valley Civilisation (2500 to 2000 BC) provides one of the earliest starting points in understanding the nature of planning activity within the Indian subcontinent. Writing about the city of Mohenjo-Daro, a large city in the Indus Valley Civilisation (see Fig 2), Jansen discusses how “its construction and design must have been perfectly planned by master builders ...(who) must have had prior experience of the technology involved” (1993:48). But in these cities, Jansen (1993) shares dilemmas of historians in not knowing ‘who built these cities’ or ‘who were the members of the ruling

class'. However what is interesting is that the planning of these cities was underpinned by a vision to create an 'equal' and/or a 'just' city. For instance, the planning and design of elite built forms such as palaces and elite burial grounds were avoided (Piggott 1962; Wheeler 1968) although class distinctions did exist.

With the "development of the first state level organisation in the Indo-Gangetic Civilisation" (Shaffer 1993:60) by 300 BC, planning activity in the Indian sub-continent (see Fig 3) began to be conceptualized within a centralized state that was based in a capital city and which was ruled by hereditary elites of society - kings (Rajas) and the priests (Brahmins). Kirk (1978) discusses some of the principles of such a centralised polity that were outlined in an ancient Indian text, the *Arthashastra* and particularly in how these principles shaped the planning of Indian city states in the Indo-Gangetic civilisation from 300 B.C. – 300 A.D. *Firstly, that society had to be effectively organised for the economic viability of city states.* The role of city states along the river Ganges was seen as central for the sustenance of trade and commercial activities. To support the economic activities in these city states an effective socio-political organisation of society was therefore necessary. Individuals carrying out (or expected to carry out) similar functions were grouped together. This resulted in the delineation of different groups such as peasants, traders, kings, and priests. Such organisation of society gradually developed into an extensive caste system that continues to exist in contemporary India.

Secondly, that the political control of city states was to be exercised by a class of hereditary elites. The extent of such control enjoyed by a group also reflected the benefits enjoyed by that group from land in the city states. For instance, while all communities had to pay taxes, the Brahmin communities or priests, and members of the Royal Family were exempt from land taxes. As a result, a hereditary control over land through a functional organisation of society remained an essential characteristic of these earlier Indian cities (Linda 1993) and which subsequently informed the planning of cities in the Mauryan Empire (321-180 BC) to urban areas in the Mughal Empire (1100-1700 AD).

However, it was only towards the early nineteenth century, that the significance of 'decision making by non-hereditary elites' and 'the concept of private property' began to emerge, that drew on the colonial practices of the British Indian Empire (1700-1947 AD) (see Fig 4). Scriver demonstrates how the Public Works Department established in 1855 in colonial India,

signalled the modernist agenda in planning thought “where new norms of professional excellence and expertise were taking hold” (2007:76). And by the 1870s, a system of ‘standard plans’ and ‘type designs’ had been institutionalized within the workings of the Department. By providing a detailed account of how the Public Works Department had shaped the built environment in the Indian subcontinent, Scriver brings out two key factors that underpinned the basis of planning thought in colonial India – an environmental control of a hostile weather and the control of the colonised ‘other’. But to assume that these two factors reflect a unique approach to British ‘colonial’ activity is to draw a rather simplistic conclusion. India has been colonised many times before the arrival of the British. Further, “the term, ‘colonial town’ which is used for British towns in India, can also be used for earlier towns like Fatehpur Sikri, and for later ones like Jamshedpur or Chandigarh, symbols of dominance over the countryside where they have been planted, towns often linguistically at variance with the area beyond and from which they are separated not by walls of brick or stone”(Gupta 1993:245), but by what Jan Morris terms as “the fortification of profound apathy”(1985:130).

The partition of Colonial India in 1947 into two independent nations, India and Pakistan, marked significant changes to governance in the Indian sub-continent (see Fig 4). Within such shifts in governance across India, the significance of ‘decision making by non-hereditary elites’ and ‘the concept of private property’ that was earlier informed by British colonial presence in India greatly shaped the Constitution of independent India. Given that India comprised of different states, the Constitution that was written in 1956 described the Indian polity as a Union of states and laid down a federal structure for governing the nation. However, in post-independent India, planning activity was not shaped by national planning frameworks as during the colonial rule but rather was guided by the needs and priorities of different state governments across India. This is because the Constitution accorded legislative competence on matters related to land to state governments. As a result, town planning became the responsibility of state governments and so naturally, town planners worked in state government departments.

However, after India became independent, it is important to note that in public policy, ‘planning’ largely became synonymous with ‘economic planning’ and where an agency of the central government, the Planning Commission plays a key role in the preparation and

implementation of the national economic planning exercise, known as the Five Year Plan system, or a statement of how public money will be spend over the next five years. Previously, such ‘planning’ activity was restricted to national and state governments alone. However, from 1992 and based on an amendment to the Indian Constitution, local governments prepare Five Year Plans and not ‘development plans’ as in the UK - as the next section demonstrates, local governments have a role only in development control and not ‘development planning’. Such shifts have been often referred to in the Indian context as ‘decentralized planning’ and in other cases, as ‘decentralized governance’. For example, the much talked about, People’s Plan Campaign (1996-2001) reflects the manner in which the state government in Kerala engaged with local governments, non-state actors and communities in preparing Five Year Plans. Thus, when one encounters phrases such as ‘bottom-up’ planning or community involvement in the planning process, it becomes essential to tease out whether it is with reference to ‘economic planning’ (and part of the national economic planning process) or ‘town planning’ (which is within the legislative competence of state governments).

But what is also interesting is that the Constitutional Amendments of 1992 also advise state governments to delegate town planning functions, particularly ‘development planning’ functions to local governments - however there has been great reluctance on the part of state governments to do so. As a result, as the next section unpacks, town planning function still remains the responsibility of state government departments.

Key characteristics of contemporary planning practice

By unpacking how planning practice in India comprises of ‘development planning’ as well as ‘development control’, one can start to understand how town planning responsibilities are distributed amongst various actors. The discussion will take into account how ‘development planning’ and ‘development control’ are engaged with by national, state and local actors. For the purposes of discussion in this paper, ‘development’ refers to “the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land” (Cullingworth and Nadin 2006:149).

The terms used to describe ‘development planning’ and ‘development control’ vary: (1) with regard to ‘development planning’, in India, it refers to the preparation of regional plans (in only large urban areas) and master plans while in England, it refers to the preparation of structure plans and local development frameworks, and in Scotland, it refers to the preparation of strategic plans and local development plans, and; (2) ‘development control’ is used in England, while ‘development management’ is used in Scotland, whereas in the Indian context, ‘development control’ regulations or ‘municipal building bye-law’ regulations are widely used.

In addition, it would be useful to discuss the administrative structure of state governments and local governments in India before going on to discuss ‘development planning’ and ‘development control’.

Administrative structure of state governments

Indian public administration rests on the theory of a dichotomy between policy making and implementation, with the task of policy making resting with the ‘secretariat’ and that of implementation with ‘executive agencies’. The secretariat consists of various ministries supported by one or more departments. This separation of powers exists both in central and state governments across India. For instance, in the state of Kerala, the Ministry of Local Self-Government is supported by the Department of Local Self-Government. The role of the minister is to decide policy. He/she is also responsible to the legislature. The role of the secretary of the secretariat department is to assist the minister in deciding policy by offering support. The secretary is supported by upper management administrative officers (Additional secretary and Joint secretary), middle management administrative officers (director, deputy secretary and under secretary) and lower management (section officer/superintendent, assistant and lower division clerk). The orders issued by the secretariat ministries and departments are the final orders of the Government. However, some of secretariat departments are attached directly to the office of the Chief Minister; for instance, the Planning and Economic Affairs Department of which the State Planning Board is a part of. The State Planning Board is responsible for formulating policy on wide ranging functions including the preparation of Five Year Plans, and decentralised planning in Kerala (Figure 5).

The role of the executive departments, on the other hand, is to implement the policy formulated in the secretariat ministries and departments. The executive agencies consist of a wide range of agencies including various government departments, autonomous, semi-autonomous and public statutory bodies created under laws /rules for achieving specific goals. For instance, the executive agencies include the Department of Town and Country Planning, Department of Panchayat, Department of Urban Affairs are all executive departments under the Ministry of Local Self-Government and secretariat department, Department of Local Self-Government. Similarly, the administrative structure of local governments is based on a separation of powers between policy formulation and policy implementation (see Fig 6). Now the key characteristics of planning practice (see Fig 7) in India are discussed.

Development Planning

‘Development planning’ in India is the responsibility of Town and Country Planning Departments of various state governments or of Development Authorities (specially constituted by state governments) for large urban areas. The role of state governments in development planning is particularly significant because as Wood (1958) notes that in the absence of a national Town and Country Planning Act, state governments in post-independent India went on to legislate their own town planning legislations. However, at the national level, there is an advisory body, the Town and Country Planning Organisation which set up in 1956 continues to provide guidance to state governments but lacks legislative authority in formulating and implementing town planning as the state governments. Planning practice within the purview of local government competence is of recent origin and particularly following the constitutional amendments in 1992 when state governments were directed by the central government to allocate town planning functions to local governments. This is now gradually albeit slowly facilitating town planners to work in local governments in addition to working within state government machinery.

Currently ‘development planning’ is carried out by two state level actors, Town and Country Planning departments of the state government, and Urban Development Authorities (for large urban areas). The output of a development planning exercise is usually a Master Plan (or Development Plan) for the particular locality, and a Town Planning Scheme (for specific areas within the locality). For instance, Ahmedabad Urban Development Authority (AUDA) is an agency set up the State Government of Gujarat in 1978 to plan for the sustainable

development for Greater Ahmedabad or the area outside the boundary of Ahmedabad Municipal Corporation (extending to an area of 190 square kilometres). AUDA prepares a Master Plan for Greater Ahmedabad as well as Detailed Town Planning Schemes (Ahmedabad Urban Development Authority 2008). Different zones are identified in the Master Plan and which also outlines what uses are permissible or prohibited in particular zones.

Detailed Town Planning Schemes are usually prepared for an area of over 100 hectares with “an objective to convert original agricultural plots into urban plots with proper shape, size and access” (Ahmedabad Municipal Corporation and Ahmedabad Urban Development Authority 2006:17). Detailed Town Planning schemes will also outline how land for development will be assembled for instance either through: (1) land acquisition, where public authorities under the Land Acquisition Act of 1894 acquire large tracts of land after paying compensation to land owners at prevailing land prices and then develop them in an appropriate manner; (2) land readjustment and pooling, where public authorities bring together the group of land owners, and reshape every plot of land so as to give it regular shape and better access to infrastructure – as there is no acquisition or transfer of ownership, there is no need for paying compensation to the land owners (Ballaney 2008).

Although state governments have overall responsibility for ‘development planning’, the preparation of development plans is influenced by a few national actors. For instance, schedule of ancient monuments prepared by the Archaeological Survey of India (those of regional/local importance are scheduled by state government-led, Archaeological Department), and the listing of historic buildings by the Indian National Trust for Culture and Heritage (INTACH), a not-for-profit organisation, are important considerations in the preparation of the ‘development plan’ or ‘master plan’ and might in some cases, provide the basis for: (1) broad protection measures through the designation of ‘a conservation area’ in the development plan; (2) restricting or prohibiting certain activities on or near listed or historic buildings, for instance through the preparation of ‘detailed town planning schemes’. Increasingly, in this regard, Heritage Commissions are being constituted by various state governments across India consisting of local councillors and members of state government departments, who can advice on the listing and reusing of historic buildings. In some states

like West Bengal, the state government has delegated this responsibility to local government to list historic buildings.

The role of local government in development planning is virtually non-existent. But increasingly, central government has been funding local government to prepare 'city development plans' or a plan that identifies key investment opportunities and funding priorities in the local area. But it is important to bear in mind that 'city development plans' do not form part of the 'development planning' framework. For instance, the Ahmedabad City Development Plan, a central government funded initiative to develop and meet future goals of Ahmedabad (through the identification of core projects and their delivery mechanisms) are jointly prepared by Ahmedabad Municipal Corporation and Ahmedabad Urban Development Authority. Although Constitutional Reforms initiated in 1992 require state governments in India to delegate town planning functions, in Gujarat as is elsewhere in the country, development planning functions largely rest with planning departments of state governments (in the case of Gujarat, this means the Town Planning and Valuation Department of the State Government) and with Development Authorities but not with local government.

Development Control (or Management)

With respect to 'development control', there is however a national framework, the National Building Code (NBC), which is formulated by the central government ministry, Ministry of Agriculture, Food and Civil Supplies, Consumer Affairs and Public Administration. Unlike earlier versions, NBC 1970 and NBC 1983, NBC 2005 is mandatory and provides the basis for state government legislation on 'development control'. The state government legislations are generally referred to as 'General Development Control Regulations' or as 'Building Bye-Laws' or as 'Municipality Building Rules', and in a sense specify what conditions need to be satisfied to obtain a 'development permit' (for any material change on the use of land, e.g. sub-division of land into residential plots) or 'building permits' (e.g. to construct a new building or to make alterations to an existing building). These conditions need to be satisfied at: (1) the zonal level, where for instance the proposed development should be permitted as in the Master Plan or the Detailed Town Planning Scheme; (2) the building level where a range of space requirements need to be satisfied (such as minimum size of a habitable room or the minimum width of a corridor).

Thus, one can say that development control in India is linked to both zoning regulations (as stipulated in the Master Plan) as well as building regulations (as set out in the state government development control regulations) and that there are two key actors within ‘development control’: urban development authority (constituted by state governments) and local government. To ensure that new development complies with the state government development control regulations as well as provisions of the Master Plan, every person who intends to carry out development needs to obtain a ‘development permission’: (1) from the (Secretary or the head of administration of the) local government, if the proposed development falls within the jurisdiction of the local government; (2) from the concerned urban development authority, if the proposed development falls beyond the jurisdiction of the local government but within the boundary of the Urban Development Authority.

CONCLUSION

This paper examined some of the key characteristics of the planning system in India. In the process, it also revealed that local governments are still not fully involved in planning practice and that their role is more or less restricted to ‘development control’. This is in spite of the recommendations to state governments across India following the Constitutional Amendments in 1992 to delegate ‘development planning’ functions to local governments. Thus one hand, there is a clearer understanding of who is involved and how in different aspects of planning practice in India, but equally it has also emerged that local governments have an ambiguous role within the planning system particularly in relation to ‘development planning’. These findings raise two interesting questions that in some sense reflect the challenges facing the future of planning practice in India.

Firstly, how might we develop a body of planning knowledge with which to engage with these ambiguities – what lessons from other contexts might be valuable, or whether one needs to ‘look within the context for answers’? For instance, Campbell and Fainstein (1996) talk about the significance of historical and contextual influences in shaping planning thought in the United States of America and United Kingdom. Closely linked to such arguments, Cullingworth and Nadin (2006) have unpacked a range factors by comparing planning traditions in the United Kingdom and United States. They argue that context matters and where historical and contextual influences do shape planning thought. Similarly in the Indian context, Gupta (1993) points to historical influences in how settlement patterns have evolved.

Firstly, she argues that of the 220 towns in India with a population of more than a hundred thousand in 1981, more than 180 towns were established before two hundred years. Secondly, she points to the fact the basic urban landscape in India including the very large cities of the Ganga-Yamuna delta, medium-sized towns in Tamil Nadu and Maharashtra, the rural-urban continuum in Kerala, were all present even before the railways were introduced by the British.

But such an approach of viewing 'planning activity' in the Indian context as 'unique' can be problematic. That there has been 'cross-cultural interaction' between societies since pre-modern times has been supported by evidence (Bentley 2006). For instance, Shaffer has shown that there exist similarities between the Harappan cities and the succeeding Indo-Gangetic Civilisation that emerged at around 700 B.C. He argues that cities in both these civilisations were based on a food producing economy consisting of agricultural and pastoral units, utilized mud and bricks in the construction of buildings and employed the use of a written script. Based on cultural similarities cutting across geographies, anthropologists have also pointed to the significance of 'diffusionism' and of how city life moved from one place to another (Carter 1983).

As an alternative to the notion of planning as 'unique', there have been arguments that planning in India is (and has been) shaped by colonial rule. However not everyone agrees that town planning in India should be viewed through a western conceptualisation. For instance, Patrick Geddes prepared detailed reports on nearly fifty Indian towns, and although he advocated measures for improving transportation and reducing congestion, however was sensitive to the structures of older towns (Meller 1990). Particularly, Geddes established that many of the older towns in India were situated along rivers due to religious beliefs (Spodek 1980). Through a comparative study of Madurai and Madras in south India, Lewandowski (1977) demonstrates how the role of the temple is greatly relevant in contemporary India. The societal implications of religious institutions such as temple rather than its locational attributes are particularly significant because such institutions have shaped social structures such as the caste system in India. A temple is, in Stein's words, "a statement about its constituent social groupings" (1977:3). However, through a western conceptualisation, the caste system as a social grouping within the Hindu religion is often taken for granted in broad planning activity. In response, and as a challenge to such modernocentric views, some scholars have argued that 'alternative rationalities and alternative modernities' exist within

the Indian context. For instance, Chakraborty (2000) illustrates how in the Indian context (in the state of West Bengal), every day practices and customs do not necessarily follow the categories derived from European experience.

Secondly, the question of scale at which planning knowledge is to be generated – on one hand, planning activity is within the legislative competence of state governments and increasingly, there are calls for local governments to become more responsible in planning practice. The experiences of planning interventions in some of the states in India seem to suggest possible turns that planning activity might take. More recently in 2001, and building on the success stories of the People's Plan Campaign in involving communities and non-state actors in the preparation of Five Year Plans, a group of town planners in the district of Kollam in Kerala have set out to integrate 'economic planning' with 'town planning' – resulting in the Integrated District Development Plan model.

The Integrated District Development Plan model replaces the People's Plan Campaign as a mechanism by which the state government in Kerala engages with local governments in preparing Five Year Plans. The IDDP model was implemented as an experimental model in Kollam district and the Kerala state government accorded sanction to the project vide GO (MS) No.62/2003/Planning dated 1st August 2003 (Easow and Thomas 2005). As a result, town planning activity is no longer restricted within the four walls of the offices of town planning departments of state governments (Karunakaran 2006). Further, town planning activity is seen as an integral part of an 'economic planning' process (of preparing Five Year Plans) where town planners work out a locational dimension to wide ranging public investments. In doing so, town planners are adapting particularly in being able to negotiate with elected representatives from different local and district governments on the priorities of public investments and their spatial dimensions.

Although the Integrated District Development Plan in Kerala reflects an interesting turn in planning activity within India, Jain (2003) points out that there have been shifts in planning practice in other parts of the country as well. These include: (1) public-private partnerships to provide urban services in Nasik, Pune, Chennai, Tirupur, Indore, and Delhi; (2) the use of municipal bonds in Ahmedabad, Bangalore; (3) housing and infrastructure development in Haryana and Uttar Pradesh. In addition, there has been an active involvement of civil society

actors (known as the voluntary sector in India) in engaging with many developmental issues in society as well as the increased involvement of external agencies such as the World Bank and the Asian Development Bank in formulating urban development initiatives in developing countries (Robinson 2002; UNCHS 2001; World Bank 2000) across India.

It is in this regard, shifts in planning activity in some states such as Kerala with the formulation of the Integrated District Development Plan model - from a conventional, rational decision making approach to a more politically engaged process, or what Friedmann (2003) refers to as a 'non-Euclidian mode of planning', seems to point to the nature of planning activity in contemporary India. It is within this context that the lack of academic debate, in how and whether the town planning profession might act as 'an agent for change' in contemporary India signals an important yet under-researched inquiry. And consequently, whether it makes sense to talk of an 'Indian planning system', or if one should make references to the 'planning system in Kerala' or 'planning practice in Delhi'.

To conclude, there is considerable interest in both policy and academic circles in the emergence of India's status as an economic powerhouse (Gopinath 2009). Although the planning system in contemporary India is going through a phase of further transformation, with local governments gradually starting to become important actors in planning practice, a key question still needs to be engaged with in the Indian context - "what role can planning play in developing the city and region within the constraints of a capitalist political economy and a democratic political system" (Campbell and Fainstein 1996:1)? This is in some ways clarifying the role and relevance of planning practice in India today.

About the background paper

Following the award of a Carnegie Trust funding in 2009 to carry out field research in India in 2010, this background paper was developed: (1) by drawing on some of the material collected during fieldwork conducted in 2006 as part of my doctoral research; (2) by reviewing additional secondary literature in 2009-10; (3) on the basis of materials collected for the delivery of lecture in March 2010, titled 'Planning system in India: a discussion' for postgraduate students studying European Urban Conservation in the University of Dundee; (4) and also through conversations in March/April 2010 with town planners in India. A follow up to this paper will be written up following fieldwork in August/September 2010.

In different stages of this study, invaluable comments and suggestions from the following are gratefully acknowledged: Tony Jackson (Senior lecturer, Town and Regional Planning, University of Dundee), Barbara Illsley (Senior lecturer, Town and Regional Planning, University of Dundee), Manik Gopinath (part-time tutor, Town and Regional Planning, University of Dundee), Baiju Karunakaran (Senior Town Planner, Government of Kerala, India) and Shubha Verma (Conservation Architect, Delhi, India). I would also like to thank Tracey Dixon in Town and Regional Planning at the University of Dundee for converting this document into an accessible online resource.

List of Figures

Cities/ U.A.	Civic status	Population 2001	Average annual growth rate 1981–1991	Average annual growth rate 1991–2001
1. Greater Mumbai	UA	16.36	3.4	2.9
2. Kolkata	UA	13.21	1.9	1.9
3. Delhi	UA	12.79	4.7	5.1
4. Chennai	UA	6.42	2.6	1.8
5. Bangalore	UA	5.68	4.1	3.7
6. Hyderabad	UA	5.53	6.6	2.7
7. Ahmedabad	UA	4.51	2.9	3.6
8. Pune	UA	3.75	4.5	5.0
9. Surat	UA	2.81	6.4	8.5
10. Kanpur	UA	2.69	2.4	3.2
11. Jaipur	M.Corp.	2.32	4.9	5.3
12. Lucknow	UA	2.26	6.6	3.5
13. Nagpur	UA	2.12	3.6	2.7
14. Patna	UA	1.70	1.9	5.5
15. Indore	UA	1.63	3.4	4.7
16. Vadodara	UA	1.49	4.4	3.2
17. Bhopal	UA	1.45	5.8	3.6
18. Coimbatore	UA	1.44	1.9	3.1
19. Ludhiana	M.Corp.	1.39	7.2	3.3
20. Kochi	UA	1.35	3.8	1.8
21. Visakhapatnam	UA	1.33	7.5	2.5
22. Agra	UA	1.32	2.6	3.9
23. Varanasi	UA	1.21	2.9	1.7
24. Madurai	UA	1.19	1.9	1.0
25. Meerut	UA	1.16	5.6	3.7
26. Nashik	UA	1.15	6.4	5.8
27. Jabalpur	UA	1.11	1.7	2.5
28. Jamshedpur	UA	1.10	2.1	3.2
29. Asansol	UA	1.09	5.2	4.2
30. Dhanbad	UA	1.06	1.8	3.0
31. Faridabad	M. Corp.	1.05	8.6	7.0
32. Allahabad	UA	1.04	2.9	2.4
33. Amritsar	UA	1.01	1.9	4.2
34. Vijaywada	UA	1.01	3.7	1.9
35. Rajkot	UA	1.00	4.7	5.3
All India urban			3.1	2.7

Source: Census of India (2001), and Sita and Bhagat (2006). UA – urban agglomeration. Decadal growth rates have been averaged to obtain annual growth rates.

Fig 1: Metropolitan areas in India (Shah and Satish 2006)

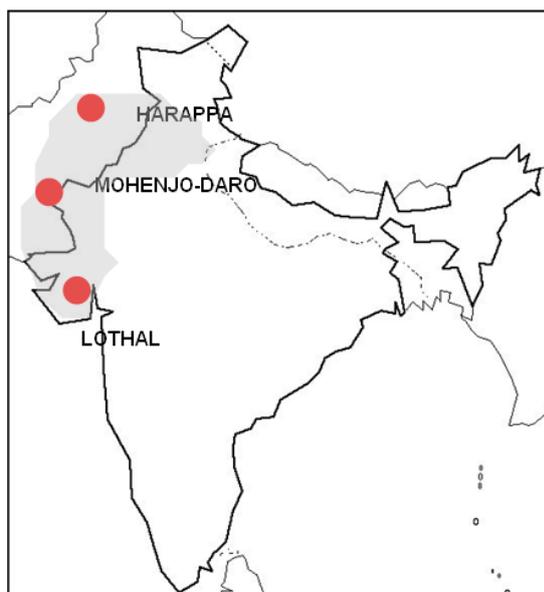


Fig 2: Cities in the Indus Valley Civilisation (2500-1500 BC)



Fig 3: Indo-Gangetic Civilisation (321-184 BC)

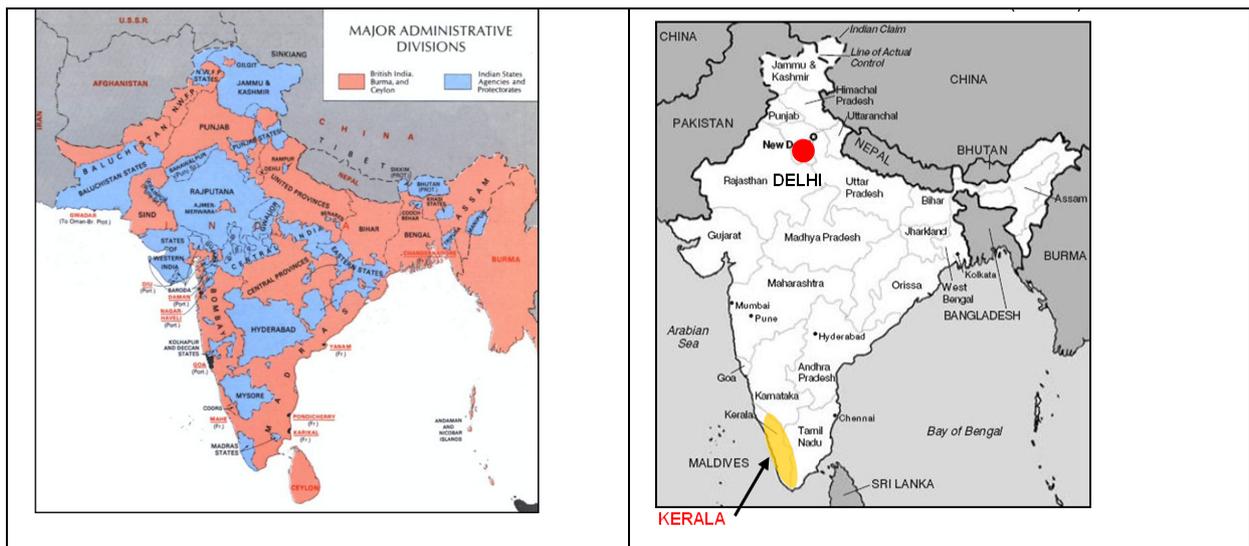


Fig 4: Shifts in administrative structures in the Indian subcontinent
 Key administrative divisions of the British Indian Empire (map on the left) with provinces of British India coloured in red and princely states in blue. The map on the right shows the India (in white) after 1947 (Schwartzberg 1992))

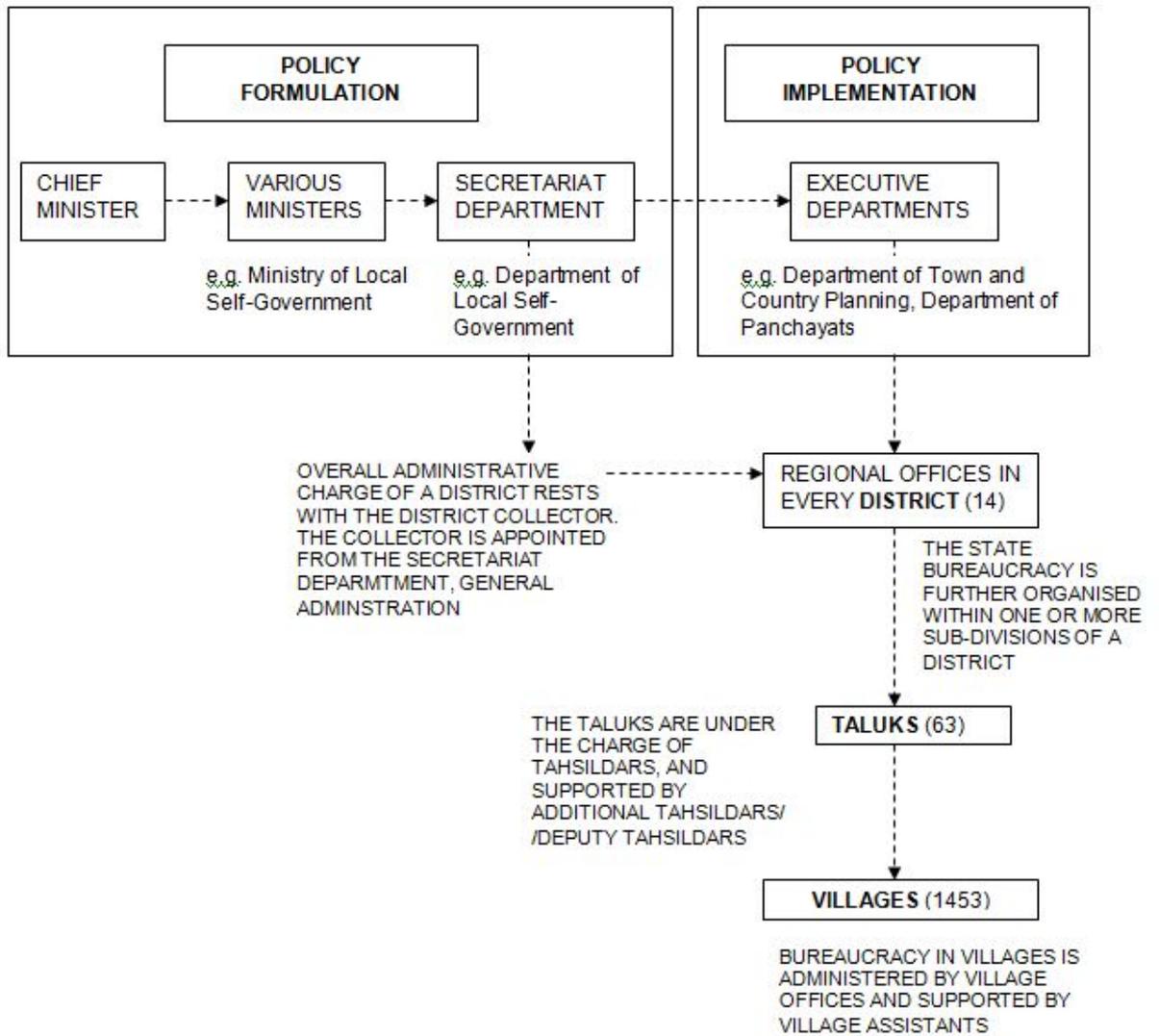


Fig 5: Administrative structure of a state government

(Structure based on Kerala state government and developed from fieldwork carried out in India in 2006 as part of doctoral research)

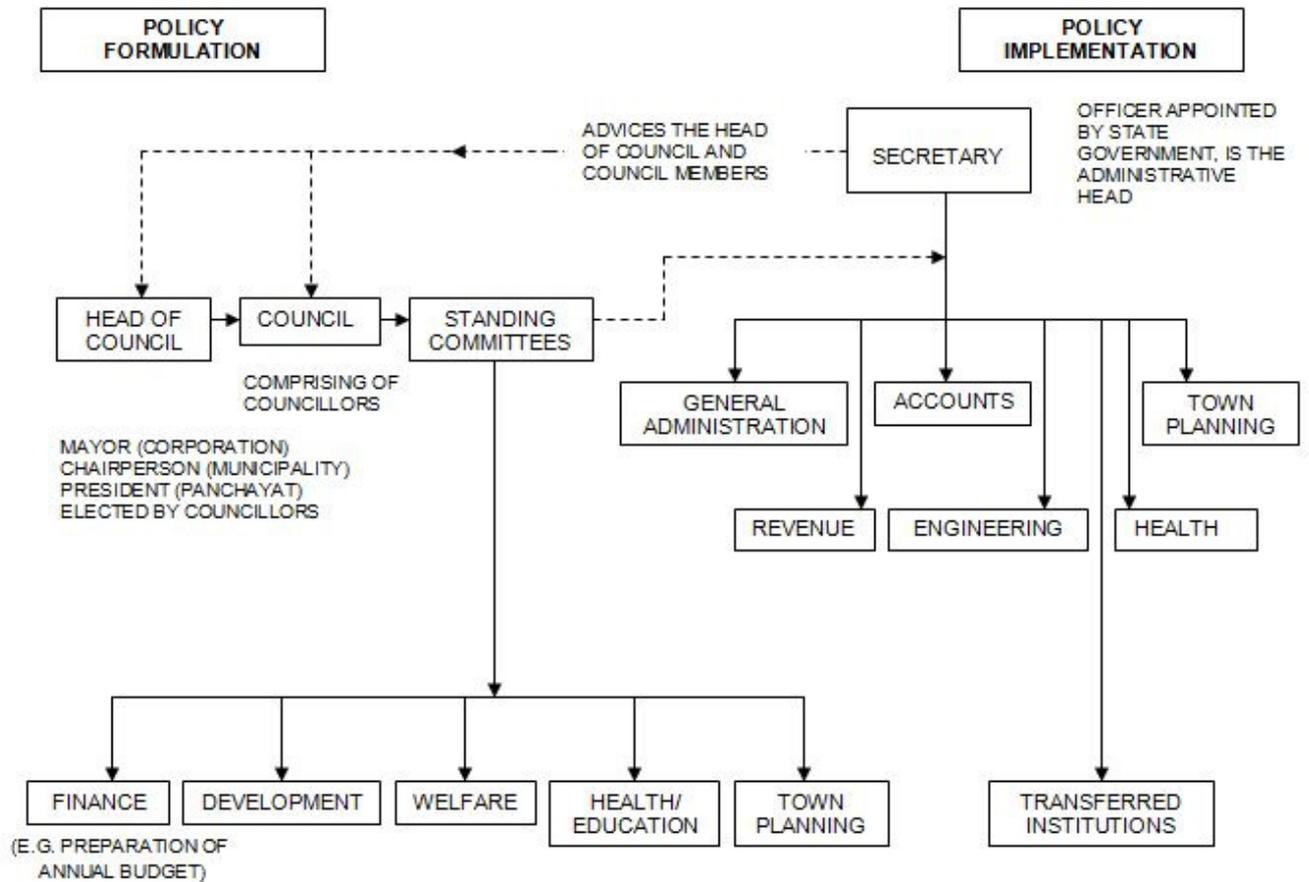


Fig 6: Administrative structure of a local government
 (Structure based on local governments in Kerala and developed from fieldwork carried out in India in 2006 as part of doctoral research)

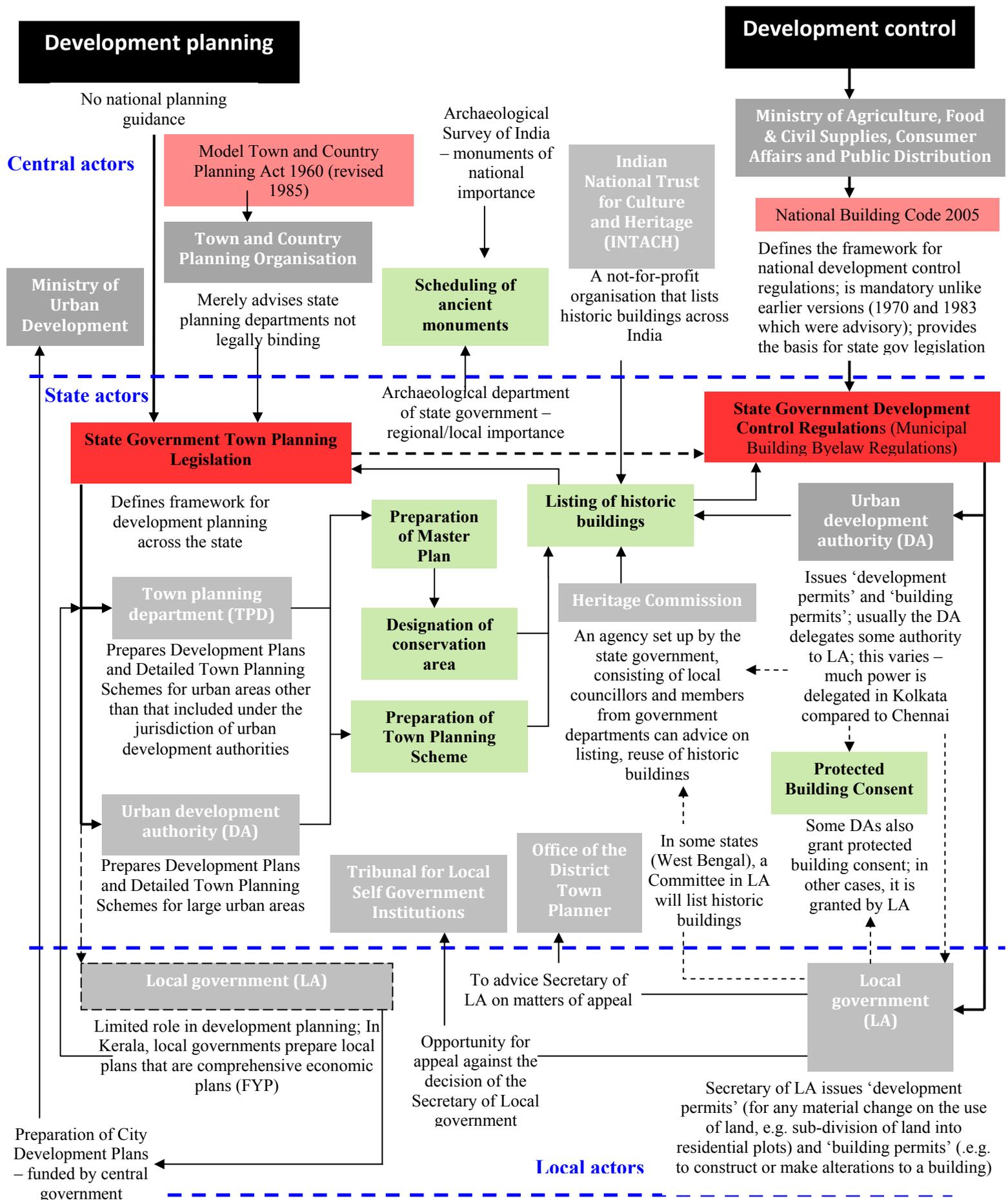


Fig 7: Key characteristics of the planning system in contemporary India

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