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Dynamics of Integration in India's Policy Making: An Analysis of the Urban and Energy Sectors

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Cities and towns are becoming major economic, employment generation and revenue earning centres. These cities also host the maximum percentage of urban population. The contribution of services and industry relative to agriculture is a rough indication of the performance of the urban sector towards the gross domestic product (GDP). Urban Development in India is a state subject and the central government performs an advisory and coordinating role, apart from providing technical and financing assistance for promoting orderly urbanisation. The reason for this has been subtly elucidated in the Eighth Five Year Plan as 'The identification of regional urban systems was suggested on the basis of regional characteristics and the needs and functions of each town in its regional context'.²

The policy of urban development is still evolving in India. The general perceptions of the policy makers in the 1950s and 1960s was that India, being a predominantly agricultural economy, would be affected with too much importance given to urbanisation. It would also lead to a drain of resources from the country side.³ An analysis of the five year plans and subsequent policies also reveal that the importance given to urbanisation has increased from early 1990s. Till then, the importance of cities as propellers of economic growth was discounted in the policy circles and the problems arising out of the cities were treated more at par with social and welfare schemes, and as only sectors of residual investment.⁴

The post-1991 reforms led to a gradual rise in industries both from domestic and external investments. Many cities have mushroomed as economic activities are centered on them. But, at the same time, it has led to unplanned growth, leading to environmental degradation, transportation and infrastructure constraints. The policy making and implementation problems require an appraisal in the need of efficient planning and implementation.

Developing countries have adopted many policies to tackle the growing needs for infrastructure (roads, railways, ports, airports among the many). But, with the booming infrastructure and energy requirements and the necessity for efficient management of resources in urban areas, it is very important to analyse the consistencies in the spheres of urban and energy policies in the domestic economy. This paper will analyse the integration of energy policies in the process of urbanisation in India.

National Urban Planning in India

The five year plans prepared by the Planning Commission of India reflect the aspirations and long-term plans of the central government on all aspects of economy and development. These plans can be helpful in analysing the policy continuation regarding various sectors. The urban planning and development has consistently evolved over the past 10 plans, with a clearer picture emerging in every subsequent document.

The foremost plans were the settling down period for India. In the initial five-year plans, resources were concentrated on rehabilitation efforts for refugees from Pakistan. The first generation of housing and urban reforms in India began with the setting up of the Ministry of Works and Housing, along with the National Building and Town/City planning organisations. The city of Chandigarh was also allocated substantial resources, primarily due to the fact that it was on the India-Pakistan border, as a part of the refugee rehabilitation efforts.

The second plan witnessed the evolution of town and country planning legislations in individual states along with the foundation for master plans for important towns and cities. It is essential to consider that the housing and rehabilitation policies were given more importance in both rural and urban areas, especially for the low-income groups. This is a reflection of the national policy of the then Indian governments, tuned more towards a socialistic framework. Subsequently, master plans of the major cities were prepared and the state capitals of Gandhi Nagar and Bhubaneswar were developed.⁵

It was only in the Fourth Five-Year Plan (1969-74) that the policies started reflecting growth and concentration of population in cities and the need for a balanced development. Another important aspect was the vision to develop smaller towns with spatial economic activities. These economic activities were aimed at generation of income for the residents of the small towns. Coupled with this, the plan also brought out a Scheme for Environmental improvement of Urban slums , to provide minimum services like water supply , sanitation and street pavements in 11 cities, which were later extended to nine additional locations. The Housing and Urban Development Corporation was established to fund the remunerative housing and urban developmental programmes, aimed at turnovers.

The plan of 1974-79 also concentrated on the development of smaller towns and cities. It is only in this period that the problems which could emanate from the larger cities and towns, especially in terms of civic services were given importance. The Urban Land (Ceiling and Regulation Act) was enacted to prevent equitable distribution of landholdings in urban areas. Apart from the coining of master plans for major cities, the urban development aspect as a whole was not given importance in all the plans. This is especially essential in terms of overall guidance for urban transportation and city planning. Till the 1970s, importance was given for housing and welfare schemes for the urban poor and the underprivileged.

Also, in the 1980s, the government introduced a plan called Integrated Development of Small and Medium Towns, which reflects a method of reducing people's movement to urban areas, by providing employment and infrastructure facilities to towns with less than one lakh (100,000) population. The development of small towns was further enunciated by the reflections on the setting up of new industries and commercial and professional establishments in small, medium and intermediate towns.

In most of the policies, housing has been used synonymously with urban development. The seventh plan (1985-90) called for private participation in housing sector, and the public sector

were called to mobilise resources for housing, providing subsidised accommodations for the poor and acquisition and development of land. The National Housing Bank was also established along with the launch of the Urban Basic Services for the Poor. But there was still no clear policy to recognise cities as economic growth and income generators. The plans still predominantly addressed the urban and rural poor, rehabilitation and improvement of smaller towns, in order to avoid large influx into cities. Therefore, a strong inkling towards welfare measures as compared to economic and industrial planning was felt through the plans.

The National Housing Policy was announced in 1988. In this, the role of the government was reflected as 'a provider for the poorest and vulnerable sections and as a facilitator for other income groups and private sector by the removal of constraints and the increased supply of land and services'.⁶ Till the 1980s, the policy recommendations and plans did not reflect a coherent definition of urban development and planning, at least at the national level. But urban development is a state subject and an analysis of the state and individual city plans might give a clearer perspective.

The report submitted by the National Commission on Urbanisation in 1988 elucidated the gaps in the policy implementations. The Report pointed out the reality of continuing and rapid growth of the urban population as well as the scale and intensity of urbanisation, the critical deficiencies in the various items of infrastructure, the concentration of vast number of poor and deprived people, the acute disparities in the access of shelter and basic services, deteriorating environmental quality and the impact of poor governance on the income and the productivity of enterprises.

It was only after this that the economic dimension of urban planning was given utmost importance. The seventh plan stated that 'planning of urban development should essentially be supportive of the economic development in the country'. It explicitly suggested the using of private investment to set up industries in small and medium towns to prevent population flow to urban areas. Significant importance was given to balanced development by slowing the growth rate of metropolises and major cities and also the revitalisation of the civic bodies.

In 1990-91, the union government formulated a policy of 20-point programme under the Ministry of Urban Development. But in the analysis of the same, there seem to be a lot of overlapping in terms of urban development and poverty alleviation policies in rural areas. For Example, under the schemes, allotment of house sites and construction assistance to rural landless agricultural workers have been covered. Also, the eighth plan initiated an urban transportation consortium fund to assist state governments to conduct feasibility studies for transportation systems in major cities. Another important landmark suggestion was the initiation of Spatial Planning Approach, which necessitated preparation of regional plans by the state governments with technical assistance from the centre.

Plan Outlay in Housing and Urban Development Sector

Plan	Total Outlay	Housing & Urban Development	Percentage share in the total
(Rs. in million)			
First Plan	20688	488	2.1
Second Plan	48000	1200	2.5
Third Plan	85765	1276	1.5
Annual Plan(1966-69)	66254	733	1.1
Fourth Plan	157788	2702	1.7
Fifth Plan	394262	11500	2.9
Annual Plan (1977-80)	121765	3688	3.0
Sixth Plan	975000	24884	2.6
Seventh Plan	1800000	42295	2.3
Annual Plan (1990-92)	1338350	3001	2.2
Eighth Plan	4341000	105000	2.4

The percentage share of housing and urban development sector as part of the total plan outlay has been consistently hovering at about 2-2.4 percent. How did the government address the overlapping issues of urbanisation, poverty and environment? In 2000-01, the erstwhile Ministry of Urban Development and the Ministry of Employment and Poverty were combined into one and known as the ‘Ministry of Urban Development and Poverty Alleviation’, and it was divided into two departments: (a) Department of Urban Development; and (b) Department of Urban Employment and Poverty. Here, the government makes a marked distinction between urban and rural poverty.

The 12th Schedule of the 74th Constitutional Amendment Act or the Nagarpalika Act of India, defined 18 new tasks in the functional domain of the Urban Local Bodies, as follows:⁷

- 1) Urban Planning including town planning.
- 2) Regulation of land use and construction of building.
- 3) Planning for economic and social development.
- 4) Roads and bridges.
- 5) Water supply for domestic, industrial and commercial purposes.
- 6) Public health, sanitation conservancy and solid waste management.
- 7) Fire services.
- 8) Urban forestry, protection of the environment and promotion of ecological aspects.
- 9) Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded.

- 10) Slum improvement and up gradation.
- 11) Urban poverty alleviation.
- 12) Promotion of cultural, educational and aesthetic aspects.

Subsequently, the ninth and the tenth plans identified the development of urban areas as 'economically efficient, socially equitable and environmentally sustainable entities'. This provides a slight indication of the incorporation of environmental conscious planning. In spite of formulating two national housing policies, the central government is yet to configure a general national urban policy for the country as a whole.

A general overview of the plans reflect that the plans have tried to cover a variety of issues at the same time, such as low income housing, alleviation of urban poverty and unemployment, mass urban transportation systems in metropolitan cities, improvement of urban environment, promoting private sector participation in the provision of public infrastructure and of the community and non-government organisations in urban planning and management of specific components of urban services, democratic decentralisation and strengthening of municipal governance.⁸

The urban land and housing policies have been given importance, especially through the urban land ceiling and regulation act. Also, the repatriation and rehabilitation of urban poor and improvement of their services have found space in every plan. This indicates a consistency and continuation in the planning process of the commission with regard to social and welfare provisions.

Policy Progress as compared to recommendations in the Plans

The Indian political economy is yet to have its unique national urban policy even after 60 years of its existence. This is one fine example of decentralised working but such a mechanism has not proved to be effective. Many recommendations from the planning commission demand the need to have a top down approach. But the fact that many state economies are functioning without a national policy gives certain prominence to decentralised working. Therefore, in a federal system, it is important to have complimentary national and regional policies.

The national urban policy proposes to address problems relating to urban infrastructure deficiencies by giving special emphasis to the housing sector, water supply and sanitation, municipal solid waste management and urban transport. It also proposes to reduce urban poverty by increasing investment in poverty alleviation programmes, development of employment generation strategy and by trying to integrate poor communities into city planning by improving access to services and land rights.⁹

In so far as the urban issues are concerned, the legislative powers of the Union are limited only to the following subject/areas: ¹⁰

- Delhi and other Union Territories
- Property of the Union
- A subject of the state list which two or more state legislatures authorise Union Parliament to legislate.
- Amendment of the Constitution of India.
- Model Municipal Laws

It is also important to note that a draft of the National Urban Transport Policy has been designed by the central government with the objective ‘to ensure safe, affordable, quick, comfortable, reliable and sustainable access for the growing number of city residents to jobs, education, recreation and such other needs within our cities.’ (Government of India). Another initiative by the Department of Economic Affairs in the Indian Ministry of Finance and the Asian Development Bank has led to a report titled ‘Facilitating Public-Private Partnership for Accelerated Infrastructure Development in India’, stressing on the importance of enhanced private participation in rural and urban infrastructure.

The first few plans revealed minor efforts at this through collaborations with the Institute of Local Self-government at the University of Birmingham in the United Kingdom in organising two specialised training courses for officers associated with urban development activities in the centre, state and local bodies and specialised institutions. The government also has collaborations with the Dutch government. Efforts were also on to implement urban development mechanisms through the Colombo Plan. These measures should be actively pursued and more efforts at engaging private sector are the need of the hour, for the resource constrained federal Indian structure.

The decentralisation of urban governance and management, introduced by a constitutional amendment in the early 1990s, led to the introduction of the Jawaharlal Nehru National Urban Renewal Mission by the Indian government in 2005. It was meant to generate a performance-based mechanism for states through the implementation of best practices in the development of urban centres and the decentralisation of funds to municipal offices by the states. This was introduced by the United Progressive Alliance government, along with many schemes for rural India. This latest initiative has included many factors like transportation rules and regulations, road width, increasing parking spaces and also improving energy efficiency, to measure the performance of the urban local bodies. Within this purview, the next section will focus on the important aspects of India’s energy policy.

Overview of India’s Energy Policy

A study of India’s energy policy options, based on the Integrated Energy Policy Report¹¹ by the Expert Committee in 2006, reveals that the broad vision includes the necessity to meet the demand for energy sources from all sectors and install efficient incentive-disincentive mechanisms for usage and savings.¹² According to India’s energy outlook as stated in its tenth five year plan, the energy conservation efforts are mostly proposed to be targeted in four sectors-industry, transport, agriculture and domestic sectors. This is mainly due to the sectoral consumption patterns.

It is important to note that India has not developed a coherent energy policy and the four main energy ministries act like “different countries at work.”¹³ India’s central energy ministry was divided in 1992 into the Ministries of Coal, Petroleum and Natural Gas, on-conventional energy sources and a separate power ministry. The Planning Commission and the Department of Atomic Energy also play a vital role in energy policy. It is generally felt that the lack of coordination between all these institutional centres hinder effective implementation. The Fuel Policy Committee (1974), Working Group on Energy Policy (1979) and then the report on Integrated Energy Policy (2006) by an expert panel led by Kirit Parikh¹⁴ are the leading recommendations on India’s energy policy. Also, an Energy Conservation Act, 2001, is being held in ‘abeyance’ for want of awareness in energy conservation areas.

The integrated energy policy has made the following recommendations for India's energy security in the long run:

- a) Energy for growth: The population of India is expected to reach 1.47 billion by 2031-32. In order to help millions of people living below the poverty line, an estimated level of eight percent growth is necessary. The report states that 'to fuel a sustained eight percent growth requires the basic capacities in the energy sector and related physical infrastructure such as rails, ports, roads and water grow by factors of three to seven times by 2031-32, alongside a 20-fold increase in nuclear and a 40-fold increase in renewable energy.'¹⁵
- b) Reliance on both commercial and traditional energy sources: The report also states that India's reliance on traditional non-commercial energy sources will rise in absolute terms to 185 Mtoe in 2031-32 from the current level of about 150 Mtoe, despite the share of traditional sources being reduced by about 20 percent. It is also clear from the policy recommendations that providing clean commercial fuels to households and divert more supply to industry and power generation.¹⁶ It is, thus, important to ensure energy efficient mechanisms in place for residential and transport uses, in order to divert more energy for growth generating activities.
- c) A diversified energy basket: It is projected that fossil fuels will dominate, along with coal, oil and natural gas in the coming decades. But with respect to domestic demand and use, renewable energy will serve as an important resource base. By 2031-32, import dependence, which will definitely fuel competition at the geopolitical level, would be about 29 percent in the most energy efficient scenario and about 59 percent in the most energy intensive scenario.¹⁷ The report has also reiterated the fact that reducing energy intensity will definitely reduce demand and will make the projected growth rate happen at lower levels of energy uses. Coal is expected to remain India's most important energy source. The report, thus, states that alternative sources of energy coupled with energy efficient and conservation methods should be prioritised. A look at the following data will reveal a better picture of India's current consumption scenario. Transport and residential sectors consume about 32 percent of the total available energy. As is stated in the report recommendations, if the government concentrates on ensuring efficient uses of energy in these two areas, more energy can be diverted for industries and growth generating enterprises, without having to increase the import dependence.

Integration of Urban and Energy Policies

The urban centre, as a unit of analysis in energy policy, is gradually gaining importance. The above sections have delineated the energy and urban policies in both China and India, and also have given an overview of the consumption and conservation patterns adopted in their domestic economies. Keeping this in mind, this final part of the chapter will analyse the reasons and factors involved in the effects of urban residential and transport sectors and why they have to be studied under the purview of energy policies and the conservation mechanisms in place.

The energy saving potential in the urban residential and transport sectors were estimated at about 20 percent each for India in 2000 and about 28 percent and 20 percent for China in 2003. With advances in energy efficient technology and effective conservation policies, the saving potential for energy in these two sectors is immense. The governments of both these

countries have embarked on some energy efficient and conservation policy mechanisms in the past few years.

In India, few energy conservation policies have been proposed. The Energy Conservation Building Code for the construction sector was introduced which basically sets out targets for minimum energy performance standards for the design and construction of non-residential buildings. It has also established a Bureau of Energy Efficiency with representations from the Ministries of Power, Coal, Petroleum and Natural Gas, Non-conventional Energy Sources, Renewable Energy and Atomic Energy. This Bureau was formed as a part of the Energy Conservation Act, 2001.¹⁸ This has been targeted at industrial and commercial consumers of energy. Also the Indian Ministry of Power has stated that nearly 25,000 MW of capacity creation through energy efficiency in the electricity sector alone has been estimated.

The Standards and Labelling (S&L) programme has been identified as one of the key activities for energy efficiency improvements. The S&L programme, when in place, would ensure that only energy efficient equipment and appliance would be made available to the consumers. Initially, the equipment to be covered under S&L programme are household refrigerators, air-conditioners, water heater, electric motors, agriculture pump sets, electric lamps and fixtures, industrial fans and blowers and air-compressors. Preliminary discussions have already taken place with manufacturers of refrigerators, air conditioners, agricultural pump sets, motors, etc., regarding the procedure to fix labels and setting standards for minimum energy consumption.

An amendment to the constitution, referred to as the 74th amendment in terms of higher decentralisation of powers to the municipal bodies in India has also not reflected an initiation towards energy management efforts. Subsequently, the ninth and the tenth plans identified the development of urban areas as 'economically efficient, socially equitable and environmentally sustainable entities'. This provides a slight indication of incorporation of environmental conscious planning. In spite of having formulated two national housing policies, the central government is yet to configure general national energy and urban policies, respectively for the country as a whole.

The conservation efforts were initiated a decade back but they have not been substantially implemented. This has been 'due to the lack of adequate focus on institutional arrangements to devise suitable incentives and disincentives backed by statutory power of enforcement.' But here, an integration of this conservation policy with the ministry of urban development and the transport sectors might prove to be beneficial, considering the decentralised functioning of the latter.

A few examples from other countries in terms of energy conservation methods give a very optimistic picture in this regard. In the United States, Canada, Australia, New Zealand, Malaysia, Germany and Taiwan, the practice of 'Green Buildings' is followed as set by their Environment Protection Agencies. In the United States, the Leadership in Environment and Environmental Design has been enacted through a law and is expected to help save 20 percent on energy cost and 20 percent reduction in water costs.¹⁹ Through this law, the State of Seattle alone has had about 35 percent reduction in energy demand.²⁰ In Barcelona, new buildings are not given approval unless 60 percent of the heating is from solar power. Similar rules are in place in the United Kingdom and Denmark.

Another important initiative in the conservation sector has been the introduction of compact fluorescent lamps (CFL) in many countries. It is estimated that 110 million American households can save energy to power a city of 1.5 million people by switching to CFL lamps. The Indian state of Rajasthan introduced this scheme in the public sector. More recently, the Indian government has announced similar plans. The law of large numbers will play an important role in energy conservation, especially in the household sector.

South Korea, Japan, Australia and Mexico have stringent norms for the procurement of electrical and electronic appliances, most importantly by the local governments. A significant example in terms of urban decentralisation and energy efficiency can be studied in Bulgaria wherein the local bodies have been participating effectively in helping to improve energy efficiency standards. This can be used to study India's decentralised urban system and as to how energy policies can be filtered through the devolved channels.

Conclusion

An analysis of the planning, legislation and implementation mechanism of the urban development policies have led to the formation of a haphazard picture vis-à-vis the entire sector. The plans show signs of consistency with more issues being added as and when the structure of the political economy warrants them. The addition of the role of cities as wealth creators in the course of the seventh and eighth plans enunciates the same.

Despite the fact that India comprises many states with unique local endowments and attributes, an evident feature of all the plans has been the lack of regional cooperation within a national framework, in order to avoid ad hoc planning and implementation by separate entities. This calls for the need to expedite the progress of the national urban policy. The national urban transport policy recently approved by the Indian government is a positive step in the integration of energy and transport issues. The top-down approach has also been recommended in the ninth plan, with calls for plans being formulated by the centre on the basis of feedback from states. The common operational problems such as unavailability of funds and has specifically brought about the problem of decentralisation also deserves attention. Wastage of funds is also evident through multiplicity of programmes targeted at the same group with no proper linkages amongst them.²¹

Therefore, a national policy to guide and compliment the state policies is the need of the hour. Effective energy use and conservation policies at the national and regional levels will also help at the international level, in terms of procurement of vital energy supplies and also in setting standards for conservation norms.

Endnotes

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³ Ministry of Urban Development, <http://www.urbanindia.nic.in/moud/urbanscene/urbanreforms/main.htm>, Government of India

⁴ Ibid.

⁵ Compiled from the documents prepared by the Planning Commission and Ministry of Urban Development, Government of India, <http://planningcommission.nic.in/plans/planrel/fiveyr/welcome.html> and <http://www.urbanindia.nic.in/moud/urbanscene/urbanreforms/main.htm>

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