

# **INFRASTRUCTURE FINANCING AND EMERGING PATTERN OF URBANISATION: A PERSPECTIVE**

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## **1. Introduction**

Large sections of planners and policy makers in the country have argued that there exists no serious problem of infrastructural deficiency that can not be tackled through management solutions. All that is needed is to restructure the system of governance, legal and administrative framework in a manner that the standard reform measures can be implemented. Reduction of public sector intervention, ensuring appropriate prices for infrastructure and civic amenities through elimination or reduction of subsidies, development of capital market for resource mobilisation, facilitating private and joint sector projects, simplification of legislative system to bring about appropriate land use changes and location of economic activities etc. are being advocated as the remedial package (World Bank 1995, Expert Group on Commercialisation of Infrastructure 1996, World Bank 1998).

The public sector and other para-statal agencies that had been assigned the responsibility of producing and distributing infrastructural facilities have come in for sharp criticism on grounds of inefficiency, lack of cost effectiveness, resulting in continued dependence on grants for sustenance. Some kind of "financial discipline" has already been imposed by the government and Reserve Bank of India, forcing these agencies to generate resources internally and borrow from development cum banking institutions, and, in a few cases, from capital market at a fairly high interest rate. This has restricted their areas of functioning and, what is more important, changed the thrust of activities.

Solutions are being found also in terms of their efficient, transparent and decentralised management of the facilities. With the passing of the 74th Amendment to Indian Constitution (Ministry of Urban Development 1992) and corresponding legislations, amendments, ordinances etc. at the state level, decentralisation has become the keyword in governance. The vacuum created by the limited withdrawal of the state in the provision of infrastructure is sought to be filled up also through non-governmental organisations (NGOs) and community based organisations (CBOs), besides the local authorities.

The enthusiasm for the above package of "management solutions", both among the international as also national organisations, is responsible for the issues concerning their impact on settlement structure and access of the poor to the infrastructural amenities not receiving adequate attention among researchers. However, given the disparity in economic strength of the towns and cities and their unequal access to capital market and public institutions, this perspective would enable the larger cities to corner much of the advantage from the system. Also, large sections of urban poor are likely to be priced out of the formal systems of service delivery. A few researchers have pointed out that the indifference on the part of policy makers on these issues would institutionalise inequality in infrastructural facilities and accentuate disparity in the levels of economic development.

In the light of the dominant perspective and criticisms thereof, as discussed above, the present paper overviews the recent initiatives for resource mobilisation for infrastructural investment and analyses their impact on the structure of settlements, access of poor to infrastructural facilities and process of segmentation within the cities. The analysis has been done by taking into consideration the recent changes in labour and capital market and land management\ development practices.

The second section in the paper analyses the shift from budgetary support to institutional finance for infrastructure development and discusses the new arrangements for mobilising

resources, in the wake of the strategy of economic liberalisation and the changes in urban governance as a consequence of the 74<sup>th</sup> Constitutional Amendment. Assigning contracts to private agencies for providing infrastructural services has also been examined critically. Furthermore, infrastructure development\ improvement projects being implemented by NGOs and local communities within a participatory framework have also been evaluated. The third section overviews the scenario of infrastructure financing likely to emerge in the next couple of decades and its impact on the deficiency of amenities across states and size classes. In the last section, an attempt has been made to put forward a perspective for infrastructural development that can bring about a balanced regional development in the country and fulfill other socio-economic objectives to which the country stands committed through the Constitution and Directive Principles of State Policy. It also outlines a strategy for intervention that can help in attaining the objectives.

## **2. Financing Infrastructure Development: Recent Trends and Institutional Initiatives**

### *Budgetary Support and Institutional Borrowings*

The system of managing and financing infrastructural facilities has been changing significantly since the mid-eighties. The Eighth Plan (1992-97) envisaged cost recovery to be built into the financing system. This has further been reinforced during the Ninth Plan period (1997-2002) with a substantial reduction in budgetary allocations for infrastructure development. A strong case has been made for making the public agencies accountable and financially viable. Most of the infrastructure projects are to be undertaken through institutional finance rather than budgetary support. The state level organisations responsible for providing infrastructural services, metropolitan and other urban development agencies are expected to make capital investments on their own, besides covering the operational costs for their infrastructural services. The costs of borrowing have gone up significantly for all these agencies over the years. This has come in their way of their taking up schemes that are socially desirable schemes but are financially unremunerative. Projects for the provision of water, sewerage and sanitation facilities etc., that generally have a long gestation period and require a substantial component of subsidy, have, thus, received a low priority in this changed policy perspective.

Housing and Urban Development Corporation (HUDCO), set up in the sixties by the Government of India to support urban development schemes, had tried to give an impetus to infrastructural projects by opening a special window in the late eighties. Availability of loans from this window, generally at less than the market rate, was expected to make state and city level agencies, including the municipalities, borrow from HUDCO. This was more so for projects in cities and towns with less than a million population since their capacity to draw upon internal resources was limited.

HUDCO finances even now up to 70 per cent of the costs in case of public utility projects and social infrastructure. For economic and commercial infrastructure, the share ranges from 50 per cent for the private agencies to 80 per cent for public agencies. The loan is to be repaid in quarterly installments within a period of 10 to 15 years, except for the private agencies for whom the repayment period is shorter. The interest rates for the borrowings from HUDCO vary from 15 per cent for utility infrastructure of the public agencies to 19.5 per cent for commercial infrastructure of the private sector. The range is much less than what used to be at the time of opening the infrastructure window by HUDCO. This increase in the average rate of interest and reduction in the range is because its average cost of borrowing has gone up from about 7 per cent to 14 per cent during the last two and a half decade.

Importantly, HUDCO loans were available for upgrading and improving the basic services in slums at a rate lower than the normal schemes in the early nineties. These were much cheaper than under similar schemes of the World Bank. However, such loans are no longer available. Also, earlier the Corporation was charging differential interest rates from local

bodies in towns and cities depending upon their population size. For urban centres with less than half a million population, the rate was 14.5 per cent; for cities with population between half to one million, it was 17 per cent; and for million plus cities, it was 18 per cent. No special concessional rate was, however, charged for the towns with less than a hundred or fifty thousand population that are in dire need of infrastructural improvement, as discussed above. It is unfortunate, however, that even this small bias in favour of smaller cities has now been given up. Further, HUDCO was financing up to 90 per cent of the project cost in case of infrastructural schemes for "economically weaker sections" which, too, has been discontinued in recent years.

HUDCO was and continues to be the premiere financial institution for disbursing loans under the Integrated Low Cost Sanitation Scheme of the government. The loans as well as the subsidy components for different beneficiary categories under the scheme are released through the Corporation. The amount of funds available through this channel has gone down drastically in the nineties.

Given the stoppage of equity support from the government, increased cost of resource mobilisation, and pressure from international agencies to make infrastructural financing commercially viable, HUDCO has responded by increasing the average rate of interest and bringing down the amounts advanced to the social sectors. Most significantly, there has been a reduction in the interest rate differentiation, designed for achieving social equity.

An analysis of infrastructural finances disbursed through HUDCO shows that the development authorities and municipal corporations that exist only in larger urban centres operate have received more than half of the total amount. The agencies like Water Supply and Sewerage Boards and Housing Boards, that have the entire state within their jurisdiction, on the other hand, have received altogether less than one third of the total loans. Municipalities with less than a hundred thousand population or local agencies with weak economic base often find it difficult to approach HUDCO for loans. This is so even under the central government schemes like the Integrated Development of Small and Medium Towns, routed through HUDCO, that carry a subsidy component. These towns are generally not in a position to obtain state government's guarantee due to their uncertain financial position. The central government and the Reserve Bank of India have proposed restrictions on many of the states for giving guarantees to local bodies and para-statal agencies, in an attempt to ensure fiscal discipline. Also, the states are being persuaded to register a fixed percentage of the amount guaranteed by them as a liability in their accounting system. More importantly, in most of the states, only the para-statal agencies and municipal corporations have been given state guarantee with the total exclusion of smaller municipal bodies. Understandably, getting bank guarantee is even more difficult, specially, for the urban centres in less developed states and all small and medium towns.

The Infrastructure Leasing and Financial Services (ILFS), established in 1989, is coming up as an important financial institution in recent years. It is a private sector financial intermediary wherein the Government of India owns a small equity share. Its activities have more or less remained confined to development of industrial-townships, roads and highways where risks are comparatively less. It basically undertakes project feasibility studies and provides a variety of financial as well as engineering services. Its role, therefore, is that of a merchant banker rather than of a mere loan provider so far as infrastructure financing is considered and its share in the total infrastructural finance in the country remains limited.

ILFS has helped local bodies, para-statal agencies and private organisations in preparing feasibility reports of commercially viable projects, detailing out the pricing and cost recovery mechanisms and establishing joint venture companies called Special Purpose Vehicles (SPV). Further, it has become equity holders in these companies along with other public and private agencies, including the operator of the BOT project (Mathur 1999). The role of ILFS may, thus, be seen as a promoter of a new perspective of development and a participatory arrangement

for project financing. It is trying to acquire the dominant position for the purpose of influencing the composition of infrastructural projects and the system of their financing in the country.

Mention must be made here of the Financial Institutions Reform and Expansion (FIRE) Programme, launched under the auspices of the USAID. Its basic objective is to enhance resource availability for commercially viable infrastructure projects through the development of domestic debt market. Fifty per cent of the project cost is financed from the funds raised in US capital market under Housing Guaranty fund. This has been made available for a long period of thirty years at an interest rate of 6 percent, thanks to the guarantee from the US-Congress. The risk involved in the exchange rate fluctuation due to the long period of capital borrowing is being mitigated by a swapping arrangement through the Grigsby Bradford and Company and Government Finance Officers' Association for which they would charge an interest rate of 6 to 7 percent. The interest rate for the funds from US market, thus, does not work out as much cheaper than that raised internally.

The funds under the programme are being channelled through ILFS and HUDCO who are expected to raise a matching contribution for the project from the domestic debt market. A long list of agenda for policy reform pertaining to urban governance, land management, pricing of services etc. have been proposed for the two participating institutions. For providing loans under the programme, the two agencies are supposed to examine the financial viability or bankability of the projects. This, it is hoped, would ensure financial discipline on the part of the borrowing agencies like private and public companies, municipal bodies, para-statal agencies etc. as also the state governments that have to stand guarantee to the projects. The major question, here, however is whether funds from these agencies would be available for social sectors schemes that have a long gestation period and low commercial viability.

Institutional funds are available also under Employees State Insurance Scheme and Employer's Provident Fund. These have a longer maturity period and are, thus, more suited for infrastructure financing. There are, however, regulations requiring the investment to be channeled in government securities and other debt instruments in a "socially desirable" manner. Government, however, is seriously considering proposals to relax these stipulations so that the funds can be made available for earning higher returns, as per the principle of commercial profitability.

There are several international actors that are active in the infrastructure sector like the Governments of United Kingdom (through Department for International Development), Australia, Netherlands. These have taken up projects pertaining to provision of infrastructure and basic amenities under their bilateral co-operation programmes. Their financial support, although very small in comparison with that coming from other agencies discussed below, has generally gone into projects that are unlikely to be picked up by private sector and may have problems of cost recovery. World Bank, Asian Development Bank, OECF (Japan), on the other hand, are the agencies that have financed infrastructure projects that are commercially viable and have the potential of being replicated on a large scale. The share of these agencies in the total funds into infrastructure sector is substantial. The problem, here, however, is that the funds have generally been made available when the borrowing agencies are able to involve private entrepreneurs in the project or mobilise certain stipulated amount from the capital market. This has proved to be a major bottleneck in the launching of a large number of projects. Several social sector projects have failed at different stages of formulation or implementation due to their long pay back period and uncertain profit potential. These projects also face serious difficulties in meeting the conditionalities laid down by the international agencies.

#### *Borrowings by State Government and Public Undertakings from Capital Market*

A strong plea has been made for mobilising resources from the capital market for infrastructural investment. Unfortunately, there are not many projects in the country that have

been perceived as commercially viable, for which funds can easily be lifted from the market. The weak financial position and revenue sources of the state undertakings in this sector make this even more difficult. As a consequence, innovative credit instruments have been designed to enable the local bodies tap the capital market.

Bonds, for example, are being issued through institutional arrangements in such a manner that the borrowing agency is required to pledge or escrow certain buoyant sources of revenue for debt servicing. This is a mechanism by which the debt repayment obligations are given utmost priority and kept independent of the overall financial position of the borrowing agency. It ensures that a trustee would monitor the debt servicing and that the borrowing agency would not have access to the pledged resources until the loan is repaid.

The most important development in the context of investment in infrastructure and amenities is the emergence of credit rating institutions in the country. With the financial markets becoming global and competitive and the borrowers' base increasingly diversified, investors and regulators prefer to rely on the opinion of these institutions for their decisions. The rating of the debt instruments of the corporate bodies, financial agencies and banks are currently being done by the institutions like Information and Credit Rating Agency of India (ICRA), Credit Analysis and Research (CARE) and Credit Rating Information Services of India Limited (CRISIL) etc. The rating of the urban local bodies has, however, been done so far by only CRISIL, that too only since 1995-96.

Given the controls of the state government on the borrowing agencies, it is not easy for any institution to assess the "functioning and managerial capabilities" of these agencies in any meaningful manner so as to give a precise rating. Furthermore, the "present financial position" of an agency in no way reflects its strength or managerial efficiency. There could be several reasons for the revenue income, expenditure and budgetary surplus to be high other than its administrative efficiency. Large sums being received as grants or as remuneration for providing certain services could explain that. The surplus in the current or capital account can not be a basis for cross-sectional or temporal comparison since the user charges permitted by the state governments may vary.

More important than obtaining the relevant information, there is the problem of choosing a development perspective. The rating institutions would have difficulties in deciding whether to go by measures of financial performance like total revenue including grants or build appropriate indicators to reflect managerial efficiency. One can possibly justify the former on the ground that for debt servicing, what one needs is high income, irrespective of its source or managerial efficiency. This would, however, imply taking a very short-term view of the situation. Instead, if the rating agency considers level of managerial efficiency, structure of governance or economic strength in long-term context, it would be able to support the projects that may have debt repayment problems in the short run but would succeed in the long run. The indicators that it may then consider would pertain to the provisions in state legislation regarding decentralisation, stability of the government in the city and the state, per capita income of the population, level of industrial and commercial activity etc. All these have a direct bearing on the prospect of increasing user charges in the long run. The body, for example, would be able to generate higher revenues through periodic revision of user-charges, if per capita income levels of its residents are high.

The rating agencies have, indeed, taken a medium or long-term view, as may be noted from the Rating Reports of various public undertakings in the recent past. These have generally based their rating on a host of quantitative and qualitative factors, including those pertaining to the policy perspective at the state or local level and not simply a few measurable indicators<sup>1</sup>.

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<sup>1</sup> It has argued that the outlook for the finances of the Corporation, in the medium term, is positive as it "has been able to upgrade the tax administration framework. In the long run, the Corporation's ability to implement the proposed property tax reforms would further strengthen

The only problem is that it has neither detailed out all these factors nor specified the procedures by which the qualitative dimensions have been brought within the credit rating framework, without much ambiguity.

#### *Political Decentralisation and Investment in Infrastructure and Basic Services by Local Bodies*

The resource scarcity being faced by the central and state governments and the consequent reduction of current and capital expenditures on infrastructure and social sectors in recent years have created serious uncertainty with regard to provision of basic amenities, particularly to the poor. Earlier, the role of central and state governments in local affairs was not clearly defined. It consisted of ad-hoc and fragmented efforts at programmatic level. Since mid eighties, however, a process of shifting the responsibility to the local level has manifested clearly. Political decentralisation through Constitutional Amendment Act has been hailed as a panacea for the problems of infrastructural deficiency in urban centres. It is argued that the Act enables the local bodies to undertake planning and development responsibility as also mobilise resources for infrastructural investment.

Transferring of responsibilities to local bodies, without examining their economic base and resource raising capacity or making provision of adequate transfer of funds, may, however, have serious consequences. Several studies suggest that there exists significant disparity in the income levels of local bodies and its various components across size class of urban centres. A study by the National Institute of Public Finance and Policy (NIPFP 1995) reveals that the per capita (own) revenue for D Class cities, having population above five hundred thousand, was more than three and a half times that of A class towns, having population below one hundred thousand, in the early nineties. The tax and non-tax revenue together constituted 90 per cent of the total revenue in case of the former while the figure for the latter was 70 per cent only. Correspondingly, the percentage share of grants in total revenue for the D class cities was only 5 per cent while that for the lower class towns was as high as 18 per cent. The high dependence on external grants for the smaller towns would be a major handicap in their undertaking the development responsibility on their own<sup>2</sup>. One may, thus, argue that the larger cities are financially stronger and can take up public works and social infrastructure projects on their own which is not so for smaller towns.

The NIPFP study unfortunately does not give further break-ups for the towns falling in A class by considering the size classification followed by the Population Census. Also, the sample does not include many towns with less than 50,000 population and none with less than 10,000. When these towns are included in the sample, the disparity in revenue earnings across size class of urban centres would work out as much sharper (National Institute of Urban Affairs 1983). A large majority of these towns have come to depend increasingly on grants-in-aid, primarily due to their poor economic base and incapacity to mobilise adequate tax and non-tax revenues. With the decline in central or state assistance in recent years, it is not surprising that most of these towns do not make any investment for improving infrastructure and basic services. This has compounded their problems of inadequacy of basic amenities.

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the tax base of the Corporation. In addition, the Corporation has initiated efforts to diversify its revenue base by undertaking activities like commercial property development. These efforts are expected to be supported by the political and administrative wing at the state level -----The prevailing policy framework would have to be sustained to achieve the desired results" (Credit Rating Information Services of India Limited 1996)

<sup>2</sup> The capacity of these smaller towns becomes further restricted since about twenty percent of their total expenditure is on general administration as compared to a figure of 12 per cent for D class cities.

People in small and medium towns in the country, particularly those with less than 50,000 population, have low per capita income due to lack of employment opportunities in the organised sector, low incidence of other secondary activities, poverty induced growth of tertiary employment etc. Instability in their economy is reflected in high fluctuation\ variation in their demographic growth over time as also across regions, as noted above. Understandably, many among the small and medium towns are not in a position to invest funds for development of civic amenities. The Constitutional Amendment, making the civic bodies increasingly dependent on their own tax and non-tax resources, would further increase the disparity in the level of services and economic infrastructure across size class of urban centres. This would adversely affect the level of basic services in these towns and their capacity to absorb future growth of population or attract new economic activities.

In an era, wherein obtaining funds for investment from private sector or capital market has become the critical factor, it is not surprising that the exercises of preparing Master Plans have been thoroughly discredited. Indeed, the city level Master Plans in recent years have been referred to more for violation than for compliance since no fund is available for their implementation. Given this emerging scenario, the option of going for project preparation in formal or informal consultation with the stake-holders through the intermediation of the financial institutions, seems to be an easy way out. This, the local governments in large cities would find hard to resist. It must, however, be pointed out that preparing a Master plan to answer the needs and aspirations of local people (in different social and income brackets) and then breaking it down to a set of meaningful projects is a different exercise from that of identifying projects with high credit rating that would attract corporate investment. Assigning the responsibility of development planning to local bodies, thus, does not automatically enable them to design projects, based on a macro perspective for the town or region. The data available at the micro level are not adequate to support the optimism that the Amendment would indeed enhance the resources, particularly of the local bodies and enhance their capacity to invest in infrastructure.

Obtaining a hefty loan from capital market or even an international organisation may lead to disempowerment of local bodies. Sanctioning of the loan has been subject to the latter maintaining budgets of the sectors receiving the funds separate from the general budget. Bombay Municipal Corporation, for example, was obliged to maintain water supply and sewerage budget on accrual basis while the other budgets of the corporation are maintained on cash basis. This was the pre-condition for getting the World Bank loan under the International Development Assistance credit scheme. Similarly, a study on Pune Municipal Corporation under the FIRE project, proposes a budgeting discipline for the local bodies such that they maintain separate accounts for not merely capital and current expenditures but also for different set of sectors (Mehta and Satyanarayana (1996)). Proposals have been put forward for revising the user charges along with the norms for sectoral transfers such that a group of sectors can become independent of the general municipal budget. This is considered necessary for attracting capital investments in future years.

#### *Land as a Source of Infrastructure Financing*

Many of the state governments are trying to create a few "global centres of the future" while the city governments are engaged in competition with their counterparts, within the state or country, to grow up to that stature by attracting private corporate investment. The prospective global cities, however, face a major problem in attracting local or international investment in infrastructural facilities. The problem is that of scarcity of land within the central city and other prime locations wherein such facilities are in high demand. An ingenious method has been worked out to solve the problem. The agencies like World Bank, USAID etc. have recommended that the Floor Space Index (FSI) in the central areas of the city should be increased so that multi-storied structures can come up, providing space for business houses, commercial activities and high income residential units. The policy of giving permission for vertical growth at a high price or selling of extra FSI in central and business districts has been

welcomed by many local bodies also as an easy way of generating resources for infrastructural development. There is further incentive to this since sanctioning of loans by the international agencies is often contingent on the acceptance of a higher FSI in the central city. This has led to creation of a few high-density business and high-income residential districts and pushing out of the households that can not afford the costs.

Land is provided for infrastructural facilities and upcoming industrial and commercial houses through government intervention as also by activating the land market. Steps are taken to facilitate changes in land-use pattern through simplification of legal and administrative procedures and enabling the market to push "low valued" activities out of the city core. The low income and slum colonies are the obvious candidates for relocation in city peripheries. The shift is carried out by the state or local governments, often directly through eviction of slum dwellers, hawkers, pavement dwellers etc. Sometimes, it is done indirectly and discreetly through slum improvement schemes, "rehabilitating" them outside the city limits. Unfortunately, that has been done mostly without making any provision for alternate employment opportunities for the displaced workers<sup>3</sup>. This has led to high disparity in population density, quality of life and segmentation of the cities into rich and poor colonies.

#### *Management Contracts for Provision of Services by Private Agencies*

Widening gaps between demand and supply of infrastructural services have necessitated involvement of private sector and designing of alternate institutional arrangements. Different forms of participation have been worked out for investment and management of the services, with varying levels of responsibility and cost sharing between private and public agencies<sup>4</sup>. The most commonly used form is contracting out the tasks of capacity creation, production, distribution and management of one or a set of services to private companies for certain period. It has been argued that this would result in substantial cost saving and, at the same time, make it possible for the companies to conduct their business with profit.

In order to ensure that the contractual agreements with private or joint sector companies are executed, supervised or monitored under strict regulatory control, new regulatory\ supervisory arrangements are being proposed. Under the old system of state control, the public agencies had failed in meeting the social objectives and catering to the needs of the poor. Designing and implementing the regulatory controls in a liberalised regime is, therefore, far more challenging, in case we are serious about these objectives. Importantly, UNCHS has launched an urban management programme (UMP), with offices in many developing countries including India, for creating an enabling environment for such participatory management practices and assist the local bodies in drawing up terms and conditions of the contracts, involving community participation in management. Besides, it facilitates the local bodies in establishing contacts with possible participating companies and often conducts negotiations on their behalf.

These moves in urban areas have had some success as a number of cities have come forward to institutionalise such contractual arrangements. It may, however, be pointed out that a number of companies being engaged in the provision of the services and their making profits or local bodies reducing their financial burden through privatisation of services are by themselves no indication of success of the arrangement. Such a judgement is possible only after the issues concerning quality of the services and, more importantly, the coverage of the urban poor have been analysed in a rigorous manner.

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<sup>3</sup> Some of the government schemes do have a provision for giving the evicted slum dwellers plots or flats, in the building being constructed at the original site. It is, nonetheless, erroneous to believe that such allottees would be able to hold on to them for a long time, given their acute need for finance, growing land values and relaxation in legal and administrative environment.

<sup>4</sup> The arrangements are described as Build Operate Own and Transfer (BOOT), Build Operate and Transfer (BOT), Build and Transfer (BT) etc. depending on the nature of agreement with the private companies.



It is difficult to empirically determine the benefits and costs of this privatisation move, as it is a recent phenomenon. Reliable data on revenue and expenditure of local bodies before and after the sub-contracting arrangement or the profitability of the private agencies are yet not available. The critical information in this context would, however, be with regard to the quality of the services and the coverage of the vulnerable sections of the city population, as noted above. Unfortunately, there exists no database covering these aspects at national, state or local level. These would have to be obtained through field survey at the micro level. It is nonetheless very surprising that none of the studies conducted in connection with privatisation of services or subcontracting arrangements has attempted to focus on these aspects seriously.

An overview of studies on the contractual agreements through their progress reports and other official documents reveals that there have been problems even in operationalising the working arrangements and norms for day to day functioning even at the stage of capital investment. This is largely because India does not have much experience of partnership arrangements in the field of urban infrastructure. Many have got trapped in serious difficulties after the formal launching of the projects. In Vadodara, for example, the Municipal Corporation had worked out an arrangement with a private company to make pellets from waste, to be used as fuel. Unfortunately, the company faced serious difficulties in establishing working arrangements with the local bodies and had to finally close down its unit. Similar difficulties have been encountered in a number of other projects.

Solid waste management is one service where the local bodies have shown interest in involving the private sector. The method of collection often involves participation of citizens' groups and non-governmental organisations (NGOs). Many groups have shown willingness to spare time or money for an improved system of garbage disposal, which is behind the success stories coming from a number of cities. There is, however, no reason to believe that the coverage of the poor areas or households through basic amenities would increase after a private company takes over the responsibility. There have been demands from the companies to hike the user charges commensurate with inflation and even more. But the low income and slum colonies have resisted such moves, resulting in their exclusion from the private sector based delivery system. In such a situation, the people in these localities have not been able to raise their voices or complain against the municipal body as the latter would take the plea of passing on the responsibility to an outside agency. This has led to fragmentation of responsibility of service delivery, with marginalised areas\ people remaining under serviced or unserved, as noted above. As a consequence, there has been serious health risk for the entire urban community that may result in breaking of epidemics from time to time.

#### *Involving Community in Infrastructure Development*

Community participation in urban development projects has a history dating back to the early seventies when Urban Basic Service Programme was launched by the central government with assistance from UNICEF. The projects covered only a few slums in select number of cities. There was no perspective for building a network to cover all the slums even within the selected cities and, consequently, the solutions pursued were local in nature. Attempts were made to do social mobilisation by creating community groups and involving these in implementation of the project at the grassroots level. Community was, thus, viewed merely as an agent, providing support to state sponsored development activities to ensure better implementation, in the initial experiments of community participation.

In subsequent years it was realised that community involvement not only results in effective implementation of the projects but also leads to better designing and substantial reduction in operational costs. Following this, community was often involved not just for project implementation and supervision of work but also in designing the project. All these initiatives notwithstanding, community participation remained a state sponsored activity until the late seventies.

Community participation as a component of development strategy gained currency in the eighties as a consequence of failure of public agencies and growing deficiency in the level of basic amenities. It was argued that the community can help not only in social mobilisation but also in raising financial resources<sup>5</sup> that the local authorities need very badly. In many cases, it became possible to have substantial reduction in project cost as the prospective beneficiaries provided their labour free or at a wage rate much below that in the market. Further, the pressure of peer group under participatory arrangement resulted in better monitoring, more productive engagement of the beneficiaries in the project and better recovery of development loans sanctioned to individuals. The community was mobilised not merely for making contributions in terms of ideas and labour but also for sharing a part of the capital and current expenditure. Only, there was demand for making credit available outside the formal institutional structure, which was beyond the access of the slum communities. In several cases, attempts were made to build mechanisms at community level to ensure timely repayment of loans.

The most innovative form of community participation in infrastructural projects, which has been hailed as a major achievement in the nineties, is the neighbourhood and slum networking schemes, launched with substantial financial support from the state or central government. The people in the project area have been associated with all stages in the development of the project and are given the overall responsibility of monitoring it as also maintaining the services.

The most celebrated case of community involvement in the nineties is the Slum Networking Project (SNP) Indore. The second case - still in the process of implementation - is SNP Ahmedabad project. Similar projects are being tried out in a number of cities in Maharashtra by involving the local community and the NGOs. These projects often involve provision of roads, pavements, water supply, sewerage, drainage and waste disposal facilities, street lighting, water taps and toilets connected to a network provided on individual or community basis. Sometimes projects are designed to take up not the entire agenda of slum improvement but provision of one or a few of the infrastructural facilities. It is argued that "the slums typically cover only about 5 per cent of the land area of cities... it is thus possible to have a massive impact on the entire city and its infrastructure by working in these very small areas. Concentrating resources in these neediest areas would, thus, work out as highly cost effective"<sup>6</sup>. This approach, understandably, helps in mainstreaming the issue by underlining the fact that investment in slum infrastructure is a critical component of urban development, which can yield a high rate of economic and social return.

The advocates of the projects have argued that private industries can be motivated to join these projects as they have an interest in the overall hygiene and health of the city because that determines their business prospects in the long run. They can, therefore, be persuaded to share the cost of slum development. This perspective has allowed the advocates of the participatory approach to place the slum-linked activities within the mainstream of urban development strategy.

### **3. The Emerging System for Financing Infrastructure Development and Its Impact: A Vision for 2020**

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<sup>5</sup> " It has been demonstrated in India that, firstly, large scale renewal can be undertaken using slums as opportunities (Indore) and secondly, huge resources can be generated from the communities and supplemented by local authorities, industries and NGOs (pilot projects in Baroda and Ahmedabad)" Verma, K., Slum Networking Project (mimeo), Office of the Municipal Commissioner, Ahmedabad

<sup>6</sup> op. cit.

It would be interesting to speculate on the nature of the system of financing for infrastructural sector in about a couple of decades from now and what would be its impact on the availability of infrastructural facilities across states and size class of settlements. More importantly, it would be worthwhile to assess the possible impact of this new system on the urban structure in the country.

Understandably, the budgetary support for infrastructural projects, coming from central or state governments would be very low in two decades from now. As a consequence, the investment in small and medium towns, particularly in the less developed states would be very small. The projects for the provision of basic amenities in slums or low income areas, even in large cities not having clear stipulations for total cost recovery within a reasonable period - unlikely to be fancied by public agencies.

Unfortunately, investment in infrastructure in small towns in backward states undertaken with finances from organisations like HUDCO, ILFS will be very low. They would not find favour even under the institutional arrangements of USAID FIRE project nor of private or joint sector company because of uncertainties with regard to their commercial viability.

On the face of the difficulties in obtaining loans from financial institutions, efforts are on to develop the capital market so that the public utilities and other para-statal agencies can mobilise resources directly by issuing bonds and other credit instruments. This strategy, being operationalised with support from financial intermediaries, including credit rating institutions, has serious spatial implications. Given the need to keep user charges for the basic facilities within certain limits, many of the public agencies may not be able to raise funds from the market and launch major expansion in activities in the next few decades. Further, the cities issuing bonds, SDOs etc. for undertaking investment in infrastructure, have been forced to escrow or pledge their regular earnings from octroi, property tax, grants from the state etc. as a guarantee for debt servicing. An analysis of the arrangements, worked out by financial intermediaries, including the credit rating institutions, for tapping the capital market reveals that these are already restricting the functioning of the para-statal agencies as also local bodies.

In several cases, the public bodies have been forced to pledge their regular earnings (from grants from the state, octroi etc.) as a guarantee for debt servicing. Alternately, the guarantee has come from the central or state governments to make up the loss or even ensure certain minimum rate of return to the private agency. Importantly, the projects that are likely to be financed through such arrangements happen to be commercially viable, catering to the demands of the upper or middle class, so as to ensure profitability to the investors and other stakeholders. The arrangements would, thus, lead to a situation wherein the finances generated from the common people would get diverted for financially profitable projects, or get pledged as a security for these that are likely to benefit better off sections of population.

In case of an eventuality of the projects failing to generate the desired rate of profit, the public bodies would have to depend on the bail out by the government. It, thus, appears that the policy of liberating the public utilities and para-statal agencies from the regulatory and legislative controls of the state would bring the former firmly under the direct control of financial institutions by 2020. The state, however, would hardly be in a position to shake off its responsibility in case of failure of a project, despite the avowed desire of the lending institutions to treat the public bodies or local governments as corporate entities. Understandably, the funds from the capital market would be used in taking up infrastructural projects that cater to the needs of upper income groups or are located in rich colonies. This would result in a dilution of their social commitments including that of reducing regional imbalances and providing infrastructural amenities to the poor.

Despite all these, the new instruments like bonds, SDO (structured Debt Obligation) are likely to emerge as the dominant method of resource mobilisation by the year 2020. These would be

more acceptable to the investors than general borrowings by the local body as it insulates the former from the general risk of financial uncertainty, faced by the issuer. Its basic strength would stem from the fact that every city would have certain areas or sectors wherein it is possible to identify commercially profitable projects. Also, they would always be able to identify a few revenue sources that are lucrative and buoyant. Escrowing the earnings from the lucrative sources can, thus, support the credit instruments floated for mobilising funds for the commercially viable projects<sup>7</sup>. The instruments, issued through the state level financing institutions or special purpose vehicles (SPVs), would possibly be made further attractive for the investors by providing certain tax benefits.

It is evident that the new institutional arrangements more importantly and the credit instruments would open up an opportunity for the large cities to tap new resources. These, nonetheless would seriously constrain "the local fiscal flexibility" (Mathur 1999) by curbing the autonomy of the agency to utilise its own resources for carrying out its normal functions as also meeting some exigencies, as noted above.

The requirements of the capital market for issuing bonds, furthermore, would facilitate launching of projects that have short gestation period and high financial return. Understandably, those catering to the demands of the upper and middle class consumers would attract investment funds, both from within as well as outside the country. It would be extremely difficult to get funds for social sector projects or those targetted to the poor due to their low rate of return and high risk factor. The financial intermediaries including credit rating agencies would, thus, ensure that infrastructural investment takes place in projects with assured cost recovery. They would also create pressures for bringing about an appropriate legal and administrative restructuring, at the state and city level, so that the commercial viability of such projects is guaranteed. These would seriously restrict the choice of the projects, rendering launching of schemes for say provision of water and sanitation facilities for the poor, slum improvement etc., virtually impossible in 2020. (Kundu et. al. 1999).

Until recently, ULBs had no mandate to take up infrastructure development or launch capital projects for sewerage and garbage disposal. Now, that the states are downloading these responsibilities to local bodies, these bodies would have passed these over to private companies through contractual arrangements by 2020. These bodies are very keen to subcontract solid waste disposal to private companies. Most of the ULBs are in a dire financial state and the very motive behind contracting out is to save on capital as well as current expenses. It would, however, be difficult by 2020 for them to ensure that the private companies meet the social obligations like covering the slum population, without their paying a substantial compensation. Many among the ULBs have already negotiated with the private agencies and agreed to compensate them not in cash but in kind. In most cases, the Corporations have leased out land to the companies on a long-term basis. The companies find this arrangement remunerative because they can thereby use the precious urban land for other purposes, earning often undeclared profits. We may find a number of companies taking

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<sup>7</sup> The three corporations of Ahmedabad, Bangalore and Vijaywada have successfully floated SDOs that are secured by the cash flows from certain specific assets and\ or sources of revenue. While Ahmedabad Municipal Corporation has escrowed the octroi revenues from specified entry points, Vijaywada Municipal Corporation has been obliged to escrow the property tax and revenues from its commercial property. These two sources of revenues, i.e., octroi and the property tax, account for a substantial proportion of the revenue of the two corporations. The non-availability of these revenue sources for meeting routine expenditures can, at a future date, accentuate the financial problems faced by the corporations. Far stringent are the conditions on the Bangalore City Corporation which had to escrow a part of the proceeds from property tax and State Finance Commission grants. In addition, it had to obtain guarantee from the state government

up the job of waste disposal solely for the purpose of getting a hold on urban land for alternate uses, without going through the complex land acquisition procedures or paying their market price.

Unfortunately, it may not be possible to augment the technical competence of the city authorities to assess the cost implications of such arrangements for the people or urban economy in the long term. Given the financial situation, the state governments are unlikely to make serious efforts to create information base or provide technical assistance to ULBs for assessing the long-term implications of land deals and helping the latter in enforcing appropriate administrative safeguards. There would be no institutional network to which an ULB can look up for seeking guidance on technical matters like, the proposal to set up a garbage disposal plant by a private company. In fact, voices are likely to be raised against any such institutional "interventions". Given the enthusiasm for decentralisation, any such effort would be criticised as an attempt to undermine or impinge on the authority of the local bodies.

Despite formal pronouncements by the central and state governments from time to time and some financial support given to ULBs for these purposes, it is unlikely that the latter would succeed in reaching the poor and vulnerable in any satisfactory manner. Often the Municipal Corporations, Development Authorities and the State Level Boards have admitted to providing (directly or through private arrangements) differential levels of services to different areas or failing to cover marginal areas in the cities. Understandably, the better off localities with higher tax collections are demanding high quality facilities and even pressing for creation of separate local bodies. All these have made cross subsidisation in the provision of amenities within the cities extremely difficult in another two decades.

One is, thus, not very certain that the recent moves for liberalisation, decentralisation and invigoration of the capital market would help local bodies in undertaking infrastructural investment in the new century. These developments would, while liberating the local agencies from the control of central and state governments, place the former under some trustees or commercial banks, controlled by pure market logic. Alternately, the financial powers might also go in the hands of international "donors" and credit rating agencies who, through various innovative and complicated arrangements, can influence the expenditure pattern of municipal bodies. They would also be in a position to determine the type of projects to be undertaken and in certain cases their management system. It would be extremely important to keep a watch on the problems faced by the cities in handling their budgetary earnings and expenditures after accepting the terms and conditions for raising resources.

The adverse impact of the Constitutional Amendment on intra-urban disparity is likely to become very pronounced by 2020. Only a handful of large cities with reasonably strong economic base would have benefited from the "opportunity", opening up owing to the Constitutional Amendment. A few of these cities would possibly be able to introduce certain new taxes, increase the rates of the old ones and, at the same time, liberate themselves from the legislative and administrative controls of the state government. They might also be able to raise resources by issuing debt instruments or borrowings from international organisations, as discussed in the preceding section. It is, however, unlikely that small and medium towns would be able to benefit in a similar fashion. Consequently, the mobilisation of funds from the capital market and institutional sources would accentuate the disparity in terms of per capita expenditure and the level of amenities across the size class of urban centres during the next two decades.

Within a couple of decades from now we would face serious problems due to socio-economic segmentation in large cities. The Amendment stipulates that the ward level committees are to be constituted in all cities having more than 0.3 million people and that the former will have the powers to take decisions regarding the nature of infrastructural facilities and civic amenities, based on the capability and willingness of the residents to pay. Also, these committees will statutorily be assigned certain part of the municipal budget. The slum populations in the heart

of the large cities or their peripheries, with low affordability or willingness to pay, would understandably accept a low level of civic amenities. The elite colonies, on the other hand, would be able to attract private entrepreneurs and even the subsidised government programmes for improving the quality of services, based on their capacity to pay higher user charges and political connections. This would further accentuate the disparity in the availability of basic amenities across the wards and between the city and the periphery.

A large number of the industrial units would get located in the villages and small towns around the big cities in the new few decades. The reasons for their moving out of the large cities are easy availability of land, access to unorganised labour market and lesser awareness or less stringent implementation of environmental regulations. The poor would find shelter in the "degenerated periphery", get jobs in the industries located therein or commute to the central city for work (Kundu 1989). The entrepreneurs, engineers, executives etc., associated with modern industries and business, however, would reside within the central city and travel to the periphery through rapid transport corridors. The process of segmentation, manifested in different variants in different cities, would push the incoming migrants from rural areas largely into the peripheral zones.

A number of projects would be launched with the participation of community groups and non-governmental organisations in a number of cities and towns in many of the states. This new approach while involving the community in infrastructure development may lead to withdrawal of the state or minimal budgetary support. In the absence of the states designing an institutional network for providing technical support, the poor may be left to themselves for designing and implementing the project or simply involving them in credit access and loan recovery mechanism.

Despite much noise being made regarding participatory projects, these are unlikely to become an alternative to the formal slum improvement programmes launched by public agencies as there is not adequate evidence that the success cases are replicable on a large scale. Although the government is placing high weightage to provision of credit and training for the participatory projects, it may not be possible to do so through institutional sources due to bureaucratic hurdles. The major handicap in large-scale multiplication of the projects would be the slum households not possessing legal title to "their land".

#### *Changing Structure of Urbanisation and Access to Infrastructure and Basic Amenities*

The changes being introduced in the system of financing infrastructural financing have serious implications for the trend and pattern of urban growth in future years. During fifties and sixties, some kind of ceiling on the absorptive capacity of large cities was sought to be imposed through physical planning and controls on location of economic activities and urban land-use, imposed through Master Plans etc. These, however, could not restrict RU migration as there was large-scale violations in the Master Plan norms and land use restrictions. The growth urban population thus worked out as high or medium during the first four decades since Independence.

The annual exponential growth rate was very high - 3.5 per cent per annum - during forties. This had prompted several scholars propound the thesis of urban explosion, dysfunctional urbanisation, urban accretion etc, basically stipulating that urban centres are growing beyond their capacity, determined by the level of infrastructural facilities. The rate came down substantially during fifties and sixties but that was attributed to the adoption of a rigorous definition of urban centres in the Census of 1961. In seventies, however, the country recorded an all time high growth of 3.8 per cent. This was due not only to the existing urban centres experiencing an acceleration in their growth rates but emergence of a large number of new towns.

There has been a striking change in the urban scenario in the country since the eighties reflected in deceleration in urban growth. The annual growth rate of population recorded for urban India

was as low as 3.1 per cent during 1981-91. This has gone down further to 2.7 per cent during 1991-2001. It is indeed true that the numbers of new towns identified in the last two Censuses are not as high as reported in Census 1981. The main reason for the deceleration is however, slower demographic growth recorded in existing urban centres

The declining demographic growth goes against not only the popular perception of “urban explosion” but also questions the projections made by Expert Groups set up by various government departments during eighties and nineties, besides that of the India Infrastructure Report and the Tenth Five Year Plan. Even the United Nations had projected urban growth during nineties to be close to that of the eighties. All these can now be dismissed as overestimates. The data from Population Census 2001, thus, provides an occasion to have a fresh look at the infrastructure development policy in the country and the perspective on urbanisation.

Measures of structural reform in urban sector launched informally during eighties but formalised since 1991 were expected to accelerate rural urban migration and give boost to the pace of urbanisation. The proponents of the reform often argued that linking of India with global economy would lead to massive inflow of capital from outside the country as also rise in indigenous investment. This, in turn, would give impetus to the process of urbanisation since much of the investment and consequent increase in employment would be either within or around the existing urban centres. Even when the industrial units get located in rural settlements, in a few years the latter would acquire urban status, resulting in emergence of a number of new urban centres by the year 2020.

Critics of globalisation had, however, pointed out that employment generation in the formal urban economy might not be high due to capital intensive nature of industrialisation. Also, the reduction in the rate of public sector investment in infrastructure would continue for the next couple of decades, for keeping budgetary deficits low. A cut in infrastructural investment in rural areas, coupled with open trade policy, would, in turn, slow down agricultural growth, causing high unemployment and exodus from rural areas. This would lead to rapid growth in urban population. Thus, the protagonists as also the critics of economic reform converged on the proposition that urban growth in the post liberalisation phase would be high. The data from the Population Census 2020, however, is likely to prove them both wrong as there will be significant decline in urban growth not merely due to slowing down of natural growth of population but also RU migration.

More important than the decline in the growth rate of urban population is the change in the pattern of urban growth. During 1951-91, urban growth was generally high in relatively backward states, the states of Bihar, Uttar Pradesh, Rajasthan and Orissa and Madhya Pradesh topping the list. This is because the pace of RU migration and urbanisation were high in most of the backward states and regions that were stuck in the vicious circle of poverty. The relationship between urban growth and economic development was negative but not very strong as a few among the developed states such as, Maharashtra, Gujarat and Haryana, too, recorded high or medium growth. The other developed states like West Bengal, Tamil Nadu and Punjab experienced low urban growth.

The scenario of urban growth during this period was characterised by dualism. The developed states attracted population in urban areas due to industrialisation and infrastructural investment. However, the backward states – particularly their backward districts and small and medium towns – also experienced rapid urban growth. This can partly be attributed to government investment in the district and *taluka* headquarters, programmes of urban industrial dispersal, and transfer of funds from the states to local bodies through a need based approach. A part of RU migration in backward states could also be attributed to push factors, owing to lack of diversification in agrarian economy.

Nineties, however, make a significant departure from the earlier decades. The developed states like Tamil Nadu, Punjab, Haryana, Maharashtra and Gujarat have registered urban growth above the national average. West Bengal is the only exception whose growth rate is not particularly

impressive. The backward states, on the other hand, have experienced growth either below that of the country or at the most equal to that. It may, therefore, be argued that the dynamics of urban growth would become weak and tend to get concentrated more and more in developed regions, with the exclusion of the backward states, during 2001-2021.

The decline in the rate of urbanisation and the increasing concentration pattern of growth in the next couple of decades must be examined in relation to the new systems of urban governance and methods of financing infrastructural investment. Indeed, launching of the measures of privatisation, strengthening of legal system relating to pollution and land-use etc., would adversely affect the “informal and illegal” market for land and provision of civic services. It may be noted that the functioning of these informal markets had helped the poor to find a foothold in urban centres during the first few decades since Independence. The stricter implementation of planning norms and frequent invocation of legal system for eviction etc. during the incoming decades would further slow down immigration of rural poor. Lack of their access to basic amenities, due to a reduction in public investment on urban development and social sectors, would be yet another factor, adversely affecting the pace of urbanisation.

It is possible to predict an increase in inequality in the urban structure, along with regional imbalance in the incoming decades, as discussed above. The distribution of population in different size class of settlements, as defined by the Census<sup>8</sup>, is likely to become more and more skewed. The share of Class I towns or cities, with population size of 100,000 or more, has gone up significantly from 26 per cent in 1901 to 65 per cent in 1991. The percentage share of class IV, V and VI towns, having less than 20,000 people, on the other hand, has gone down drastically from 47 to 10 only. This is largely due to the fact that the towns in lower categories have grown in size and entered the next higher category. Unfortunately, however, there has not been a corresponding increase in the number of urban centres, especially at the lower levels, through transformation of rural settlements during the period from 1901 to 1991<sup>9</sup>.

The slow process of graduation of large sized villages into towns, through growth of industrial and tertiary activities, would be a major problem in India's urbanisation in the next few decades. The number of additional urban centres identified by the Census of 2001 is 630 which is less than that of 1991 and much below that of 1981. The process of sectoral diversification in rural economy is so weak that one would not expect more than 800 additional urban centres during the next two decades. Also, given the spatial concentration of the growth process, these new towns are likely to remain concentrated around a few large cities or regions.

The second and more important reason for the urban hierarchy to become skewed and top heavy in the year 2021 is that the larger urban centres would experience faster demographic growth as compared to smaller order settlements. The class I cities, for example, have

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<sup>8</sup> Population Census in India classifies urban settlement into six size classes as per the limits indicated below.

Population Size	Category
100,000 and more	Class I
50,000 to 100,000	Class II
20,000 to 50,000	Class III
10,000 to 20,000	Class IV
5,000 to 10,000	Class V
Less than 5,000	Class VI

<sup>9</sup> The number of urban centres has doubled while urban population has become eight-fold.



registered an average annual growth rate<sup>10</sup> of 3.0 per cent during 1981-91, which is higher than that of lower order towns<sup>11</sup>. The same pattern is noted during 1991-2001 as well. More important, the class I cities exhibit a lower disparity in their growth rates, measured through coefficient of variation, compared to those in other size classes. One would expect the former to experience relatively higher and stable demographic growth in future years as these would get more and more linked to the national and even global market (Nagaraj 1987, Kundu 1983 and Bhalla and Kundu 1982). In the smaller towns that are mostly rooted in their regional economy, however, population growth would tend to be low and fluctuating over time and space. This would further reinforce the dual urban structure in the country wherein the larger cities would get integrated with higher order system and would thus share the growth dynamics at national or global economy. This would, by and large, be absent in case of smaller towns.

The higher demographic growth in large cities, compared to the smaller towns, could, at least partly, be attributed to the measures of decentralisation whereby the responsibilities of resource mobilisation and launching infrastructural projects have been given to the local bodies, as noted above. The large municipal bodies, particularly those located in developed states, tend to have a strong economic base, and this would result in their high economic and demographic growth during the next couple of decades.

It has been noted that a strong lobby is emerging, particularly in these cities, pleading for disbanding all zoning restrictions, building laws and bye-laws and making them relatively independent of state and central level controls. As a consequence, decisions regarding location of industries, change in land-use etc. would be taken expeditiously at the local level. The decentralisation of responsibilities for development planning, sought to be ushered in through the 74th Constitutional Amendment, would help this lobby. The large cities that have relatively stronger economic base would be able to benefit from this opportunity of empowerment of local governments. As a consequence, a few of these cities would be able to attract infrastructural investment and record a high population growth. The small and medium towns, on the other hand, are unlikely to benefit from this changed policy regime. All these would explain the urban structure becoming more and more top-heavy by 2020, as mentioned above.

It was pointed out earlier that planning controls, bye-laws etc. have had little impact in restricting demographic growth of large cities in the past. Interestingly, the advantages of relaxation in these controls as also systems of infrastructural financing in the next two decades would also be taken up mostly by these cities. Due to their strong economic base and consequently high tax and non-tax revenue generating capacity, these would be in a position to put in more resources in creating basic physical conditions, necessary for attracting private investment. This would make the urban structure further top heavy as these large cities and their immediate hinterland would absorb most of the migrants.

#### *Access to Infrastructure and Basic Services*

The NSS reports an interesting pattern of improvement in the level of infrastructural facilities over time. The percentage of households having no latrine has declined significantly from 36.8 to 31.1 during the period from 1983 to 1988-89. The figure has, however, gone down only

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<sup>10</sup> The growth rates have been computed by considering the population of only those towns (for both initial as well as terminal year) that belonged to this size category in the base year.

<sup>11</sup> The class VI towns, however, are exceptions to this as many of these are special purpose urban centres, established or managed by public sector agencies, military establishments or private industries.

marginally to 30.6 per cent in 1993. Correspondingly, the percentage of households with flush system has moved up from 20.1 to 26.9 during the first period. The increase during the second period, however, is very modest, going up to only 28.5 in 1993. This pattern is observed also for the households having access to septic tank (toilets)<sup>12</sup>. Furthermore, as opposed to the increase in the coverage through safe drinking water by 6.3 percentage points during 1981-91 as per the Census, NSS reports that the figure has remained static at 88 per cent during the period from 1986-87 to 1993. One would, therefore, argue that the progress in providing basic amenities, which was reasonably high in early and mid-eighties, has slowed down in the post liberalisation phase. Based on the trend, one would predict that the rate of coverage of household by infrastructural facilities would continue to be low in the first two decades of the present century.

Most of the indicators of basic amenities show positive correlations with those of economic development across the states in the nineties. The percentage of households having flush toilets, for example, exhibits a very strong relationship with per capita income. Those for other amenities, like drinking water, toilets and electricity, too, the correlations are positive but not always statistically significant. One would argue that economically developed states are doing fairly well in providing their people access to basic amenities (Kundu et. al. 1999). This trend is likely to continue in future years implying that the improvements in the availability of these amenities would be higher in the relatively developed states.

The coverage of households through basic amenities across size class of urban centres shows regularity and a distinct pattern. The percentage of households having all the three amenities goes down systematically as we move from higher to lower size class of urban centres<sup>13</sup>. It is indeed very disturbing that in class V towns (having population between 5,000 and 10,000), the percentage of households not covered by toilet, electricity and drinking water are as high as 61, 41 and 28 respectively in 1991. The corresponding figures for the cities with more than half a million population are 22, 17 and 14 per cent only (Kundu et. al. 1999). Going by the present trend, one would expect still higher inequality in the level of basic services across urban centres in different size classes by the year 2020.

Higher rates of infrastructure investment in larger cities during 2001-21 can be explained in terms of the present development policy. Indeed, one can perceive a clear bias in favour of large cities in the current policy debate, media discussion etc. Despite the large cities having lower percentage of people below poverty line, it is mostly these cities that get covered under slum improvement and poverty alleviation programmes of international and national agencies due to reasons of greater visibility. The anomaly of giving greater attention to larger cities in all programmes for poverty alleviation and provision of infrastructure can be attributed to strong vested interests in their favour. Further, it becomes easier to cover a larger number of poor households in absolute terms because of the size factor, if larger cities are selected under a programme.

Given the present dynamics of urban industrial development in the country, the small and medium towns, located away from the "emerging global centres of growth", particularly those in backward regions, are unlikely to receive much private investment. They would find it difficult to finance any development project through internal resources or borrowings from capital market. The fiscal discipline, imposed by the government, HUDCO, credit rating agencies and other financial

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<sup>12</sup> Interestingly, the trend in the percentage of households residing in pucca houses is similar - going up by 20 percentage point from 51.21 during 1983-88 (38th and 44th round) but registering a nominal increase of 2.8 points only during 1988-93 (44th and 49th round). Furthermore, the percentage figures reported in the 49th and 50th rounds are about the same.

<sup>13</sup> The exception occurs in case of the lowest class of towns (class VI) because many among these enjoy a special status, as mentioned above, and consequently have higher level of amenities.

intermediaries, would make it impossible for them to undertake infrastructural investment of any kind. The deficiency in basic amenities would be a serious hurdle in their attracting private investment from within or outside the country. It is only a few large cities with strong economic base that would be able to secure high credit rating and raise resources through bonds and other innovative credit instruments. With governmental investment in infrastructure and basic amenities becoming less and less over the years, the disparity within the urban economy is bound to increase, as mentioned above.

#### **4. A Perspective for Balanced Infrastructural Development and a Strategy for Intervention**

It has been pointed out that launching of the programme of structural adjustment has led to a decline in public investment in infrastructure, without any compensatory gain in the contribution from the private sector. Public undertakings and para-statal agencies have become increasingly dependant on their internal resources and institutional\ private finance that have constrained their capacity to take up social sector projects. With the objective of "bringing in efficiency and accountability in their functioning", the component of subsidy has also been brought down while the cost of borrowing has gone up significantly. Furthermore, there has been increasing reliance on partnership arrangements, privatisation and community participation for launching infrastructure development projects.

It has been demonstrated in the preceding section that this changed perspective and new development strategy would accentuate disparity in the levels of infrastructural facilities across the states and size class of urban settlements by the year 2020. Understandably, the poor would get priced out of the system, organised through private or joint sector initiatives. Unfortunately, the same would be true with the delivery system under the government and semi-government undertakings as well, since these have increasingly been made to depend on institutional borrowings and capital market. All these would accentuate interurban inequality in the availability of infrastructural facilities. Furthermore, this would lead to spatial segmentation, particularly in the large cities of the country.

One may ask the question whether intervention by state in India can change the process and pattern of infrastructural development, as discussed above. The analysis of the emerging policy perspectives makes it clear that posing the issue as state versus market does not give much analytical mileage. One must ask what are the tools of intervention available to the Indian state and with what objectives these are likely to be used in the next two decades.

The changes in the system of governance and financing of infrastructural investment, brought about through structural adjustment, as recommended by several international agencies and broadly accepted by the Indian planners, envisage state's role as a facilitator. If indeed the public agencies intervene as a facilitator in the market - removing its deficiencies and saving the actors from market failures - the above scenario of growing regional imbalance would emerge, possibly with a greater ease.

Given the socio-political reality in India, it is difficult for private sector to bring about the changes in the pattern of investment in infrastructure without state becoming an active partner and bringing about the required legislative and administrative changes. Indian state has indeed responded quite favourably in the past few years by ushering in the necessary changes, although the democratic structure and bureaucratic inertia have made the process slow. The government has removed impediments in the functioning of the urban land market and facilitated the necessary changes in landuse, etc. The message has come loud and clear from the Plan documents that such changes are possible and are forthcoming.

In order to make a dent on the process of infrastructural development and their impact on urban structure, it would be important to make a significant departure from the present policy of financing the investment. Based on the above overview of the trend at macro level and its

negative implications, a strong case can be made for providing special assistance to the less developed states that are not in a position to allocate requisite funds for infrastructural projects. Particularly, small and medium towns in these states need to be supported, as their economic bases are not strong to mobilise resources for the purpose. This would imply increasing the resources allocated in the public sector for development of infrastructure. There must, however, be explicit stipulations in the schemes to ensure that most of the funds go to small and medium towns.

The capacity of the state or local government to generate employment directly through anti-poverty programmes would remain limited. The past experiences suggest that there has been considerable leakage in the self-employment programmes. Banks and other financial institutions have been unwilling to give loans to the poor, as the risk of non-recovery is very high. Also, the assets created through wage employment programmes have not contributed significantly to the development potential or long-term income generating capacity of the poor. It is, therefore, recommended that the anti-poverty programmes should primarily be directed to creation of community based infrastructure.

The state governments should take the overall responsibility of ensuring certain minimum level of the amenities to all sections of population, in different size class of urban centres, irrespective of their income levels or affordability. For this purpose, it would, be important to set up the "standards" for the infrastructural facilities in realistic terms, based on what the country can afford. The government may, however, fulfil this responsibility by engaging\ supporting private organisations, NGOs and CBOs or strengthening the local bodies.

Constitutional amendment for decentralisation of financial powers is not adequate for augmenting resources of the local bodies for this purpose. Further, it would be erroneous to depend on the capital market or the banking sector for fulfilling the social obligations or implementing a strategy of balanced regional development. All these must be backed up by actual devolution of powers and responsibilities by state governments and their use by municipal bodies. The management capacities of these bodies need to be strengthened by giving more technical personnel and training the existing staff. Manufacturing activities at the town level are noted to exhibit a strong relationship with the availability of infrastructure and civic services. One may, therefore, argue that the provision of these services in small urban settlements, besides being a goal in itself, would help in generating non-agricultural employment and diversifying their economic base.

Much of the subsidised amenities provided through the governmental programmes during the seventies and eighties have in the past gone to a few developed regions and large cities and benefited generally the high and middle-income colonies. There is no way that this can continue in a more liberalised regime during 2001-21. However, withdrawing government support and relegating the provision of the services to the market would have adverse consequences for regional inequality as also the micro environment\ health conditions within large cities. Institutional borrowings by public agencies (involved in the provision of the amenities) at high rates of interest, reduction in their grants from government etc. are likely to erode their capacity to invest in backward states, smaller order towns, slums and low income areas.

The relationship of urban industrial growth with that of infrastructural facilities has been positive. The government and para-statal institutions providing the facilities have unfortunately not exhibited sensitivity in favour of backward states in recent years. The pattern is likely to become more unfavorable to the developed states that have little capacity to attract corporate capital in future years. Similarly, the large cities would succeed in cornering much of the investment that would come to infrastructure sector. The small and medium towns, on the other hand would attract private investment neither from within nor outside the country.

To counter the above trends, new programmes must be designed that can cover the entire urban hierarchy and all vulnerable sections of population. Importantly, the capacity of the people in small and medium towns in less developed states as also the urban poor to pay for basic services would remain low during the years of structural adjustment as the prospect of an increase in their real income does not seem very bright. The programmes must, therefore, be specifically targetted and the subsidies must be made more explicit and transparent. Above all, these programmes must emerge from a long term development plan for the regional economy that gives due weightage to the infrastructural needs of all sections of population in the city as also its rural hinterland.

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