

**Evaluation of the Processes in the Implementation of Jawaharlal Nehru
National Urban Renewal Mission in Karnataka
Karnataka Urban Infrastructure Development & Finance Corporation**

Executive Summary

The Jawaharlal Nehru National Urban Renewal Mission has been conceptualized as more than the sum of its projects. Its strategy is designed to link urban policy interventions to the specific requirements of individual cities. The exercise begins with the formulation of the City Development Plan with the help of consultants, which identifies projects that are expected to generate specific outcomes in the city. And the support of the Government of India in the financing of this process is linked to the state governments and urban local bodies introducing reforms in their functioning. An evaluation of JnNURM must then look at the entire process and not confine itself to the implementation of the projects.

In evaluating JnNURM in Karnataka, as indeed any other Indian state, we are faced, right at the outset, with a fundamental question: is the city the ideal starting point for an urban policy intervention? It may be so in the advanced world where the urban-rural relationship has been defined for a century or more. But while India is in the midst of rapid urbanization we are still in a situation where the 2011 Census records that less than a third of the population lives in urban areas. The process of transformation from the rural to the urban is thus far from over. And the relationship between villages and cities remains alive, not just because of migration from the rural to the urban but also because the old homes in villages remain a safety net for workers who find the pressures of the city unrelenting. A meaningful understanding of policy interventions in the urban cannot then begin with individual cities. It must go back a step and begin with a glimpse into the process of urbanization and its influence on individual cities.

The process of urbanization in Karnataka is not evenly spread across the state. In terms of trends in urbanization there are at least five distinct categories of districts. The four districts of Bengaluru, Mysore, Dakshina Kannada and Udupi are marked by strong urbanization trends. Dharwad, Bagalkot, Belgaum, Ramnagara and Bengaluru Rural have registered moderate signs of urbanization. Bidar, Kolar, Chikballapur, Haveri, Chitradurga, Hassan, Davangere, Tumkur and Chamarajnar are districts with weak urbanization. Mandya, Chikmagalur, Shimoga, Uttar Kannada, Kodagu and Gadag raise the possibility of de-urbanization. And Bellary, Gulbarga, Yadgir, Bijapur, Koppal and Raichur are districts facing population pressure in both their rural and urban areas.

In terms of the dynamic roles they play in the larger process of urbanization it is useful to categorize the districts into three groups: those that are primarily engines of growth; those that are primarily centres of skill development for the neighbouring rural population; and urban centres under population pressure and thus in urgent need of basic facilities. While the precise categorization of all of Karnataka's urban centres into these three groups is beyond the scope of this evaluation there are a couple of cases that stand out even in preliminary analysis. In addition to Bengaluru and Mysore, Mangalore with its influence over the districts of Dakshina Kannada and Udupi would be an urban centre that needs to be treated as an engine of growth. In addition, a city in the three contiguous districts of Dharwad, Bagalkot and Belgaum can also be treated as an engine of growth. While the process of urbanization may not be as strong in these districts as it is in Dakshina Kannada and Udupi, the fact that they are a part of the relatively backward region of northern Karnataka may be reason enough to develop them as engines of growth. Taking this larger picture into account would require that the City Development Plans be designed to not just cater to the needs of a particular city in isolation but also in a way that helps manage the larger process of urbanization as a whole.

City Development Plans

There are also other reasons why the current approach to the City Development Plans may need a review. At the outset, even when seen in isolation, the City Development Plans are not consistent with the task of urban renewal highlighted in the name of the Mission. The renewal of the inner city has a very low priority in the CDPs of the two Mission cities, Bengaluru and Mysore. The CDPs do relatively better when dealing with heritage, especially in Mysore. But the place of heritage in the CDP for Bengaluru, as revised in 2009, is minimal and rather superficial. It is thus clear at the very first stage of the Mission that the focus is more on urban development rather than on urban renewal.

In dealing with urban development the CDPs tended to come up short when faced with four major challenges. First, there was the challenge of the mismatch between the administrative area and the economic area of a city. The CDP was expected to plan for the area that came within the administrative boundaries of the city. Indeed, when Bengaluru transformed its administrative boundaries with the creation of the Bruhat Bengaluru MahanagaraPalike in 2007, after the first CDP was made, it was decided to create another plan leading to the revised CDP of 2009. The administrative boundaries of Bengaluru, however, left out large parts of the information technology industry, including Electronic City. As a result the area that was being planned for in Bengaluru left out the main engine of growth in the city. In Mysore too there is a mismatch between the boundaries that emerge by tracing the built up areas of the city and the administrative boundaries of the city. Moreover, the tourism circuit around Mysore, which is an important economic resource of the city, includes Srirangapatna which is beyond not only the city's administrative boundaries but also the district boundary.

The second major challenge was in terms of managing the growth of the city. The revised CDP for Bengaluru laid considerable emphasis on the development of townships.

It did not however adequately distinguish between a residential township and one that was built around an economic activity. Bengaluru's history suggests that townships built around an economic activity, such as the public sector townships, do succeed. But residential townships, like the one built in Kengeri, tend to stagnate until they grow towards areas of the city offering economic activity. The CDPs however focused primarily on residential townships.

A third constraint built into the City Development Plans is that the poor are believed to live only in slums. Thus projects catering to the Basic Services to the Urban Poor are entirely confined to slums. A striking result of the NIAS survey however is that slums are far from being the only places where the poor reside. Less than 30 per cent of the very poor in Bengaluru live in slums, and slums account for the residence of less than 14 per cent of the other poor. A fairly significant number of the poor live in villages that have been engulfed by the city. And over three-fourths of all of Bengaluru's poor live outside slums. The pattern in Mysore is equally interesting. The city is well on its way to becoming slum free. But this only means the poor have to live elsewhere.

A fourth limitation of the CDPs arises from the fact that when planning for the city in isolation there is a tendency to ignore the pressures that the city places on its surrounding areas. The CDP for Bengaluru shows a lack of sensitivity to the possibility of a conflict of interests between the city and the rural areas. In its SWOT analysis the CDP for Bengaluru lists the water availability in the Cauvery basin as one of the strengths of the city. But the availability of this water is subject to an inter-state dispute. It is also not clear that farmers within Karnataka will be willing to allow Bengaluru as much water as the city demands from the Cauvery. The city is already beginning to feel these pressures in poor-monsoon years.

These limitations of the City Development Plans were compounded by erroneous estimates of the growth in the populations of Bengaluru and Mysore. The CDP for Bengaluru begins by estimating that if existing trends continue the city (the core BMP area and the CMCs together) will reach a population of 98.15 lakhs by 2011.¹ The CDP however goes on to argue that Bengaluru cannot maintain its growth rate and hence projected the 2011 population of Bengaluru to be just 80.15 lakhs. The 2011 Census provisional figure of the population of BBMP is, at 84.44 lakhs, more than 5 per cent greater than the estimates used in the CDP. In the case of the CDP for Mysore the error was in the opposite direction with the provisional population figures in the 2011 Census being around nine per cent less than the figure projected in the CDP. And since the projected population of the CDP was used as the basis for calculations for the subsequent sections the errors were transferred to the rest of the Plans.

Choice of Projects

In theory, the implementing agencies are expected to develop a shelf of projects based on the CDPs and JnNURM guidelines. But with the CDPs being less than overwhelming, these agencies have gained a greater freedom in their choice of projects. Indeed, it is not entirely unknown for the implementing agencies to already have a shelf of projects which they try to carry out either through their own funds or through funds from various lending agencies. They then try to use the JnNURM funding as an alternative source of finance.

In making these projects consistent with JnNURM requirements, as well as in later stages of the process, consultants play an important role. Their inputs are used both in the formulation of the detailed project report and the management of the implementation of projects. Each component under JnNURM has its own panel of consultants and it is rare to see a consultant working on a range of projects under different components. In dealing with consultants both at the level of the CDP and individual projects there is the challenge of finding the appropriate inputs that they can provide. On the one hand, in cases where their inputs are not in line with government thinking, there is the possibility of officials not buying into the

recommendations of the consultants. On the other hand, when consultants merely rearticulate official thinking their value to the entire process is reduced. The system works best only when the knowledge deficits in official circles are clearly identified and the consultants brought in to remove them. In such cases the officials take responsibility for the entire strategy even as they make full use of inputs sought from consultants.

Given the prominent role played by the implementation agencies in the choice of projects the overall direction of JnNURM in Karnataka has to be traced from the patterns that emerge on the ground. JnNURM is predominantly an urban infrastructure programme. The Urban Infrastructure and Governance (UIG) component accounts for around two-thirds of the approved costs of JnNURM projects. Together with the costs of the projects under the Urban Infrastructure Development Schemes for Small and Medium Towns (UIDSSMT), infrastructure accounts for nearly four-fifths of the approved costs of JnNURM. The relative importance given to infrastructure when compared to anti-poverty components is large enough in the small and medium towns with the approved costs in infrastructure accounting for twice the approved costs in schemes for the poor. Bengaluru and Mysore reveal an even sharper difference as in the two Mission cities taken together infrastructure accounts for well above four times the costs of the Basic Services to the Urban Poor component.

A second, somewhat predictable, pattern that emerges from the distribution of approved costs is the primacy of Bengaluru in JnNURM in Karnataka. The projects in Bengaluru account for 61 per cent of the total approved costs of projects under JnNURM in the state. This dominance occurs within a larger preference for the chosen JnNURM cities over other small and medium towns. Bengaluru and Mysore, taken together, account for over four-fifths of the approved costs of JnNURM projects in Karnataka. This pattern is consistent with the focus of JnNURM on major cities.

Choice of UIG Projects

Within this dominance of Bengaluru and Mysore there is a further concentration in specific sectors of Urban Infrastructure and Governance. In both Bengaluru and Mysore mobility has an important place in terms of approved costs under the UIG component of JnNURM. Transport accounts for as much as 44 per cent of the approved costs of UIG projects in Mysore. The number seems somewhat lower for Bengaluru at 22 per cent. But once we add other mobility related projects like underpasses, grade separators, sidewalks and flyovers to the list, the share goes up to a third of the approved costs of UIG projects. In Bengaluru drainage projects as well as storm water drains account for close to another third each of the approved costs. As a result the three sectors – mobility, storm water drains and other drainage – account for 99 per cent of the approved costs.

In Mysore the degree of concentration of approved costs of projects under JnNURM across different sectors is less, even if only in comparison to Bengaluru. The non-transport related projects under the UIG component do have one major alternative focus in water projects. The water sector accounts for 33.9 per cent of the approved costs for UIG projects so that water and transport together account for nearly 78 per cent of the total UIG costs. But the remaining 22.1 per cent is distributed across several sectors: storm water drains, heritage, zoo infrastructure and solid waste management.

The picture that emerges from the mobility related projects under JnNURM in Bengaluru is one that is focused primarily on improving the conditions for vehicular traffic. Underpasses, grade separators and flyovers are meant to increase the speed of the traffic, the TTMCs help organize the bus system as well as provide parking, and the Volvo and Marco Polo buses are expected to tempt car and other private vehicle users to switch to public transport. Some of the other projects mentioned in the CDP, particularly those relating to pedestrians and cyclists do not find a place in the projects that were chosen.

In Mysore too the JnNURM projects that gained approval were designed to help vehicle users. The two-lane Bengaluru to Mysore-Nanjangud segment of the Outer Ring Road was to be upgraded to six lanes. Transport infrastructure facilities were to be developed, including building of an Intelligent Transport System and an Innovative Environment Project for Mysore city. JnNURM also funded the acquisition of 150 buses.

The storm water drain system in Bengaluru has come under severe strain due to the inadequately planned growth of the city. BWSSB notes that cleaning natural drains is becoming a challenge for most municipal authorities owing to factors such as the discharge of untreated wastewater, encroachment, and illegal buildings. This has led to the overflow of storm water or the flooding of rainwater. This is most visible when roads turn into drains, and there have also been deaths in storm water drains and flooding of houses. The NIAS survey points out that this challenge is particularly serious in some of the older areas of the city, with the West Zone being the most seriously affected. The CDP has suggested the construction, remodelling and rehabilitation of storm water drains and roadside drains, removing silting, construction of retaining walls, laying of beds, providing enabling and awareness information architecture, and Green Area development. JnNURM has targeted the most urgent task of remodelling primary and secondary storm water drains in the four major valleys, namely Hebbal valley, Vrushabhavathi valley, Koramanagala valley, and the Challaghatta valley.

Solid waste management is an issue that has reached crisis proportions in Bengaluru. This problem may have been accentuated in Bengaluru by the city's decision to rely almost entirely on door-to-door collection of household garbage. The NIAS survey saw as many as 20.5 per cent of the households in Bengaluru admitting to disposing their garbage at the street corner. This problem is particularly acute in the slums as well as the outlying zones of Byatrayanapura and Rajarajeshwarinagar. And since street corner garbage bins have been removed in most parts of the city, a significant portion of the city's garbage is left

directly on the side of the streets. In contrast Mysore's performance in garbage collection is very much better with as high as 97.2 per cent of the households saying they use the corporation's collection system.

The BBMP has been planning a strategy to deal with the challenge of solid waste, including developing Public Private Partnerships at different stages of the MSW management cycle through service contracts, management contracts and concession contracts. Municipal Solid Waste Management in Bengaluru is not however funded under the JnNURM initiative.

The projects that have been chosen under JnNURM in Mysore show a greater awareness than the CDP of the need for a broader approach to solid waste management. As of March 2013, MCC has approved ` 29.85 crores for the development of an integrated municipal solid waste management plan using the PPP model.

Water supply is potentially Bengaluru's most serious infrastructure concern. The city originally relied on the many lakes within it. But as the lakes dried up and the lake beds put to other uses, Bengaluru became more dependent on river water and groundwater. Till recently the north of the city was supplied largely through water from River Arkhavati. But now that source too has dried up, leaving Bengaluru dependent on only the River Cauvery and the city's groundwater. There are already some signs of an emerging crisis visible in the access to water in Bengaluru.

The crisis is accentuated by the problems of uneven distribution. There is differential access to tap water both across different zones of the city as well as across economic classes. In two of the zones in the periphery of the city, Rajarajeswarinagar and Byatarayanapura, more than half the households do not have a functioning tap inside them. The economic divide is reflected in the fact that over 80 per cent of the households in the slums of Bengaluru do not have a functioning tap inside them.

JnNURM's contribution to addressing this emerging water crisis is through two major projects. The first of these approved projects is the augmentation of drinking water to the seven former municipal councils that form the periphery of Bengaluru. This is to be done by providing an additional 100 million litres per day from Cauvery Water Supply Scheme, Stage IV, Phase 1. The second approved project seeks to develop bulk flow metering and monitoring systems for Bengaluru's water distribution network.

The water crisis in Mysore does not appear to be as severe as that in Bengaluru. The proportion of households without a functioning tap inside them is only a fraction of that in Bengaluru. This is also true for all the indicators of water stress that the table lists: using public taps, buying water from tankers or in pots, or buying drinking water in cans. The difference however seems primarily one of magnitude. The issues that affect water supply and distribution in Mysore are similar to those in Bengaluru, only they are on a smaller scale.

The main thrust of the JnNURM influence on the water situation in Mysore is on modernization and augmenting water supply. The focus on modernization was also enhanced by the Centre. The only suggestion to change a project in the JnNURM process came in the case of a water supply project in Mysore where the CSMC suggested that the proposed water scheme be converted to a 24/7 supply scheme.

Despite being a globally recognized metropolis Bengaluru is still short of ensuring that every household has a toilet within it. The NIAS survey indicated that three per cent of households in Bengaluru do not have a toilet within them. What makes the problem more serious is that there are some parts of the city where the problem is much more pronounced. In at least one zone in the periphery of Bengaluru, Mahadevapura, the proportion is nearly 12 per cent. And in the slums across the city the proportion of households without a toilet in them is as high as 22 per cent.

The situation is made worse by pressures that have been developing on the underground sewage network. The capacity of the sewers, both primary and secondary, is insufficient. With storm water also getting into sewage lines there are increased sewage flows in the rainy season, sometimes even leading to the mix of sewage and rainwater overflowing onto streets. Just as storm water gets into sewage lines, there is also the problem of sewage getting into storm water drains. Sewers from slums and low-lying areas are sometimes directly connected to storm water drains. This also contributes to the pollution of lakes and the resultant growth in the number of mosquitoes. JnNURM addresses the challenge of sanitation and sewage in Bengaluru at multiple levels. It has two approved projects focusing on sanitation in the erstwhile City Municipal Councils of Krishnarajapuram and Mahadevapura. Other projects look at the underground drainage systems in Yelahanka, Kengeri, Rajarajeshwarinagar, Dasarahalli, Byatarayanapura and Bommanahalli. In addition, a project seeks to replace or rehabilitate parts of the existing sewerage system of Bengaluru.

Mysore is one of the oldest cities to have an underground drainage network. Most of the old city had underground drainage by 1904. JnNURM projects are aimed at remodelling the underground drainage (UGD) network in the old areas of the city and developing a sewage treatment plant (STP) for the areas that are currently not covered.

The heritage strategy of JnNURM in Karnataka is focused primarily on Mysore. The Mysore CDP focuses on the six areas which have been highlighted in the JnNURM heritage tool kit. These are mainly defining the importance of heritage, identifying, listing and grading heritage buildings, understanding the legal status as well as the institutional set up, sorting out the financial system and also the infrastructure which is required to promote tourism around heritage buildings.

Two main projects have been approved under the heritage component of JnNURM. The first project focuses on the heritage core and urban renewal.

And the second is on water management through surface and rainwater harvesting at Sri Chamarajendra Zoological Gardens.

The Bengaluru CDP however is not as comprehensive. It outlines the various well known tourist destinations in Bengaluru and proposes to renovate 300 heritage buildings, develop cultural centers, budget hotels and convention centers. There has however been no heritage project approved under JnNURM for Bengaluru.

Choice of UIDSSMT Projects

The Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) was launched by simply merging the two then existing schemes: the Integrated Development of Small and Medium Towns (IDSMT) and Accelerated Urban Water Supply Programme (AUWSP). The choice of specific projects is expected to be based on City Level Investment Plans (CLIPs). But the shortfalls in the small and medium towns are so widespread that a large number of projects come into consideration. And the possibilities were further extended by a willingness to go beyond the strict prioritization in individual CLIPs. A look at CLIPs for 18 of the 30 towns with UIDSSMT projects reveals that in nine of them the projects were among the priorities listed in the plans while in another nine they were not. But the projects were generally among the important infrastructure requirements of the towns. Water and drainage account for the major chunk of the 38 UIDSSMT projects spread over 30 districts. Water supply alone accounts for over 60 per cent of the approved costs of UIDSSMT projects. Storm water drains and underground drainage taken together account for around 22 per cent of the approved costs of projects, with projects covering roads and drains accounting for over 16 per cent.

The multiplicity of factors determining the choice of UIDSSMT projects may make it difficult to come up with a simple explanation for their location. It is quite clear, though, that the projects are not evenly distributed across the state. As many

as ten eligible districts – Chamarajanagar, Kodogu, Udupi, Chikballapura, Tumkur, Chitradurga, Bellary, Raichur, Gulbarga and Bidar – have not received any projects while the per capita cost of projects in some other districts is quite high. And there is no apparent reason related to urbanization that explains this distribution. There are zero project districts in regions that are rapidly urbanizing, like Udupi; districts that are deurbanizing, like Kodagu; and districts that we have classified as being under population pressure, like Gulbarga. The case of Udupi is particularly interesting as it is getting no support for its own internal tendency to urbanize.

Choice of BSUP Projects

JnNURM calls for an inclusive approach to the challenge of providing basic services to the urban poor. In practice, though, a considerable part of this inclusiveness is lost. The first source of loss of inclusiveness is the method used to identify the poor. As has already been pointed out, JnNURM identifies the poor as those living in slums, while the NIAS survey shows a significant proportion of the poor do not live in slums.

A further scope for exclusion of the poor has been built into the JnNURM initiative concentrating on housing alone. As a result the focus of the projects was concentrated on services that could be expected to come with housing, such as water and sanitation. And by the very nature of the projects, these services account for only a small fraction of the total costs. Moreover, since these facilities came with the JnNURM houses they did not quite address the problem in the other poor households. This is a particularly serious concern in a situation where nearly all the houses in slums have to use either public taps or shared taps.

There should, arguably be greater concern on the health front. JnNURM is expected to address these concerns by providing health centres. But the size of these initiatives is meagre when compared to the task at hand. The minimal expenditure on health facilities must be seen in the context of the crisis of confidence that the poor have in the urban health system. This is perhaps most evident in the decision the poor make on where their children should be born. The NIAS survey indicated that in Bengaluru, over the preceding three years of the

survey less than a fifth of slum dwellers and well below half of the lowest asset category went to government hospitals to give birth. Being forced into the hands of more expensive private nursing homes and hospitals the poor considered other options, with around 16 percent of them giving birth at home. And when they have a more stable place to stay, even if it is in a slum, close to 36 per cent of the births are at home. If we add those in slums who go back to their hometown or village for the birth, close to half the slum population of Bengaluru prefers not to use the medical facilities the city provides, whether public or private for the birth of their children.

In education the situation would appear to be a little better. Almost all children between 5 and 15 in both Bengaluru and Mysore are attending school, though this is still not quite the 100 per cent that it should be. More importantly the very significant proportion of children, even of the poor, who take tuition after school could be interpreted as a vote of no confidence in the quality of education provided in class. And the JnNURM response is almost non-existent. Housing projects that had existing educational facilities close by have not been provided with new ones in the plan. Consequently in Bengaluru, providing school buildings to BSUP houses is expected to cost barely ` 0.2 crores out of the total infrastructure cost ` 113.84 crores. In Mysore, there is no provision for school buildings in the on-going projects; however, there is a provision for an informal education centre that is expected to cost ` 0.19 crores.

Within this framework the Basic Services to Urban Poor component of the JnNURM generated 14 projects in Bengaluru. While the pattern in terms of number of units suggests a focus on construction, the picture in terms of dwelling units – a more relevant indicator – points to a clear emphasis on rehabilitation. Nearly two-thirds of these units – 14,754 units – were under rehabilitation projects.

In the development strategy for slums there is a strong case for an in-situ approach. This allows for minimal displacement of the population, allowing them to remain as close as before to their workplace and possible schools for their children. And an attempt was made to prefer this approach. In-situ development accounted for 66 per cent of the dwelling units in Rehabilitation projects, 72 per

cent in Construction projects and 90 per cent in Redevelopment projects in Bengaluru. The preference for in-situ projects can be seen in Mysore as well, though the success has been a little less than in Bengaluru.

Choice of IHSDP Projects

As in the case of the UIDSSMT projects the distribution of Integrated Housing and Slum Development Programme projects is also not even across the state. There is a large contiguous belt consisting of Kodagu, Dakshina Kannada, Udupi, Uttara Kannada, Haveri and Davangere that have not received any IHSDP projects. Along with Bijapur and Chamarajnagar they constitute a set of eight districts that have not received any projects. They stand out in contrast to Ramnagara that has received the most attention. It must be pointed out that three districts Udupi, Kodagu and Chamarajnagar have been completely left out of the JNURM process: they are not eligible for the UIG and BSUP projects and have not been given any UIDSSMT or IHSDP projects.

Implementation of Projects

There are then two distinct stages in evaluating the effects of JnNURM. The first step is to look at the implementation of the projects. It is only after the projects have been completed that we can move on to the question of looking at their outcomes. The process of implementation of projects is sought to be controlled primarily through the release of funds. Till early 2013 instalments were released once the utilization certificate was submitted; this process has been changed wherein the release of funds has been tied up with the physical progress of the project. This process of monitoring is undoubtedly useful in preventing leakages of funds as well as monitoring the quality of the assets created. But they are less sensitive to delays, as holding back funds is the instrument of enforcing control. This monitoring process is also not adequately equipped to help identify and remove other causes of delays, which are widespread cutting across various centres.

Implementation of UIG Projects

Transportation projects are among those that have had the least delays, though they have not always been completed on schedule. Since the projects in Bengaluru have all been completed it is possible to gain some insights into their outcomes for the city. The TTMCs have, in effect, three broad roles: they improve the bus terminuses; they provide parking facilities, and they are revenue generating assets that taps the real estate value of land owned by the transport corporations. With over three-fourths of the built up space being used up for parking and office space that is rented out, the TTMCs are clearly a successful exercise in creating revenue generating assets. Since over a fifth of the built up space is available for bus depots, terminuses, passenger amenities, and office space for BMTC there is a significant contribution to the smooth running of the bus system as well.

In evaluating the effect of the buses funded by JnNURM we come up against the difficulty in separating the effect of the JnNURM contribution from that of the other components of Bengaluru's bus system. The JnNURM buses were distributed across the depots of the BMTC and then merged into the regular service. Thus there is little difference between the JnNURM buses and the rest of the buses in the same segment of the system. Evaluating the impact of JnNURM is then best done by comparing the progress during the JnNURM years and a comparable number of years immediately preceding the setting up of the Mission. The growth in the average earnings per kilometre was higher in the JnNURM period than in the earlier period, with the growth being much higher in suburban routes. And if we take the percentage load factor as a sign of congestion in buses, there is a noticeable decline in the growth of the average percentage load factor both in the city and the suburban bus networks.

The long-term impact of this success would however have to be measured in terms of its ability to draw commuters away from private transport and towards public transport. A successful initiative would result in a decline in the growth rate of the cars and two-wheelers registered. The picture here is mixed both across cities and across modes of private transport. The growth rate in the number of cars registered in Bengaluru district in the seven-year JnNURM period is higher than the growth rate in the seven years preceding the launch of JnNURM. This would suggest that the luxury buses have not quite been able to get car owners in Bengaluru to rely more heavily on the public transport system. In contrast the rate of growth of two-wheelers registered in Bengaluru district over the two periods has declined sharply. It would appear that two-wheeler owners in Bengaluru are being drawn towards public transport. Mysore presents the opposite picture. The rate of growth of car owners has declined while that of two wheelers has increased, if only marginally. Any shift away from public transport in that city is occurring with car owners, while two-wheeler owners seem largely unaffected.

Beyond the public transport system the JnNURM initiatives in transportation in Bengaluru are primarily in improving mobility on the city's roads. Bengaluru Development Authority has undertaken three projects – two flyovers and one underpass.

All three projects have taken significantly longer periods to complete than was estimated in their Detailed Project Reports. This has caused the costs of all the projects to escalate quite significantly. It is also worth noting that the delay was greater in the flyover projects than in the single underpass project. The BBMP had a much larger bouquet of projects aimed at improving mobility on Bengaluru's roads. It too faced the challenge of delays and cost overruns, with all the projects being delayed. The delays in the BBMP projects are the result of a very wide variety of reasons. The availability and acquisition of land would appear to be the single largest cause for delay, with Lokayukta investigations, financing cost overruns and the absence of work fronts also being significant causes. Mysore too has seen considerable delays for similar reasons.

In the case of water and sewerage projects in Bengaluru there has been delay in the implementation of 10 of the 11 projects. One of the main reasons for delay was the time take in obtaining clearances for the right of way from numerous departments. The picture in Mysore on the implementation of water and sewerage projects is not very different from that in Bengaluru. Going by the time schedules given in the DPR, both the projects in Mysore handled by KUWSDB have been delayed.

The Storm Water Drain projects in Bengaluru have had to overcome several obstacles. This has taken its toll both on the time schedules of the projects as well as their cost. Among the causes for the delay was that the projects had to get approval before they proceeded with land acquisition. The real estate boom in 2005 made many landowners reluctant to give up their land for the compensation offered by BBMP. Moreover, many slum dwellers were given land in areas where the storm water drain was planned. In order to meet the higher costs BBMP had to request the Government of Karnataka for assistance, which resulted in further delay. Also, getting labour to work in the unavoidable unhygienic conditions led to workers falling ill, thus adding to the human and financial costs. The MUDA project for remodelling storm water drains in Mysore has also been delayed.

Implementation of UIDSSMT Projects

Given the year-wise approval of projects and the status of projects, it may not be farfetched to state that most of the projects seem to have been delayed. Discussions with DMA officials reveal that the reasons for the delay in UIDSSMT projects are not fundamentally different from those affecting UIG projects. The absence of coordination between agencies is a serious problem with UIDSSMT projects as well. There were land acquisition problems in Nanjangud and Shikaripura, which led to litigation in the High Court of Karnataka. But there were also more local factors affecting some projects. In Channapatna and Nanjangud the local representatives were not interested in the sewerage projects, and were insisting on roads and water projects.

Implementation of BSUP Projects

As some of the projects have been completed it is useful to get an idea of the impact of JnNURM by comparing the conditions in JnNURM project units with those in other slums. And the picture that emerges in terms of the effects of JnNURM on basic services to the urban poor is not very encouraging. There is very little difference in terms of the access to services between JnNURM households and households in other slums. Arguably the most striking result is that the provision of these houses does not change even the proportion of households living in rented accommodation. Those living in these dwelling units spoke of other beneficiaries who had preferred to rent out the units they were allotted. In terms of connection to sewage lines too there was not much of a difference. Four-fifths of the slum dwelling units in Bengaluru were without a functioning tap in them and the picture was not very different in the JnNURM dwelling units. This number was much lower in the slums in Mysore, at less than a fifth, and the JnNURM dwelling units had an even lower percentage of houses without a functioning tap in them. The one area where there was a noticeable difference was in the proportion of households without a ration card. The JnNURM households did much better on this score. But this was only to be expected as the allotment of these units would itself depend on the ability to access entitlements from the government.

Implementation of IHSDP Projects

The implementation of the 34 projects sanctioned in Karnataka under the IHSDP brings out several unusual features. As per information on the stated parameters of IHSDP that could be obtained from KSDB, the tender release and the tender award date for a number of projects were the same. There could be various interpretations for this pattern, including perhaps the lack of good contractors who can take up the work in small towns. Again, in a few projects, tenders were already awarded before they were sanctioned by the CSMC. Despite the promptness in awarding the tenders there were considerable delays. Discussions with KSDB

officials revealed a variety of reasons for the delay. Since the construction of houses and infrastructure works were taken up in-situ, the existing units had to be shifted in a phased manner, thus causing delay. In some cases the delay was due to the lack of payment of the initial deposit by slum dwellers. The overall picture in terms of completion of projects is not entirely negative. As much as 92 per cent of the dwelling units have been completed. Among the completed units, 83.1 per cent have been occupied.

Reforms

The 23 JnNURM reforms have been prioritized into two groups, those that are mandatory and those that are optional. In addition, Karnataka has targeted 12 sector-specific reforms in the transport sector. The 35 reforms can further be distinguished between whether they are to be implemented at the state or ULB level. The Ministry of Urban Development (MoUD) of the Government of India has verified that Karnataka has completed 89.6 per cent of the total reform target as on May, 2013. This puts Karnataka behind only Andhra Pradesh (92.6 per cent) and Maharashtra (90.6 per cent) at the national level.

Underlying this overall success are two questions: are the reforms that have been left out the more difficult, and important, ones? And how much of this reform process is attributable to JnNURM? The answers to these questions are somewhat less comforting. Among the state-level mandatory reforms that have not been completed are the creation of District Planning Committees and a Metropolitan Planning Committee for Bengaluru. This hampers the development of a comprehensive view of the needs of Karnataka's urban centres. In addition, some of the reforms, like rent control and the repeal of the urban land ceiling, that are listed as completed cannot be attributed to JnNURM for the simple reason that they were carried out before the Mission began.

In the mandatory reforms at the ULB– level a somewhat similar pattern emerges. Both Bengaluru and Mysore have managed to complete 92.5 per cent of the mandatory reforms designated for ULBs under JnNURM. The two Mission cities of Bengaluru and Mysore have achieved all the e-Governance elements

prescribed in JnNURM. But if we look beyond the specific steps prescribed by JnNURM at the outcomes in terms of actual e-Governance, the differences between the Mission cities and some other cities in Karnataka are much less stark. While several of the procedural rules stipulated are not followed in the non-JnNURM cities, most of cities have already managed to integrate information technology. Similarly, following a state-level migration to the double-entry accounting system in 2005-06, we find that all the ULBs, both JnNURM and non-JnNURM cities, already have this reform in place.

In the case of property tax too it is difficult to attribute the implementation of reforms entirely to JnNURM. There are specific elements like those related to guidance values where Hubli-Dharwad has done better than Mysore. What is more interesting is the difference that can be seen between the picture that emerges in terms of the implementation of reform measures and the one that the NIAS survey throws up from the ground. This difference is particularly wide in the case of the need to achieve a 90 per cent ratio in the collection of property tax. The picture that emerges from the ground is that this condition has been met in all the cities and towns surveyed with the exception of Bengaluru. Though the official view is that the 90 per cent target has been achieved in Bengaluru, nearly a quarter of the house owners in the metropolis said they did not pay property tax.

The emphasis of JnNURM on user charges can be seen in the reforms laying out a series of steps that will help capture the O&M costs of the services being provided and to then recover these costs. Not surprisingly the first part of this process is easier to accomplish than the latter part. All the cities, both JnNURM and non-JnNURM have separate accounting systems for the services they provide. But ensuring the O&M costs are covered in the user charges for the services provided is more difficult. Bengaluru and Mysore only manage to recover around 70-75 per cent of their total costs every year.

One area where there is a clear difference in approach between the JnNURM cities and the other cities is in organizing services for the urban poor. While internal earmarking of funds for services to the urban poor follows JnNURM specifications in the Mission cities, the other cities do not follow this norm. The earmarking of

funds for the urban poor in the other cities is based on existing systems of targeting the urban poor including funding for SC/ST, Backward Classes and the physically handicapped.

Karnataka has managed to complete most of the state-level optional reforms. Broadly speaking, there are only two categories of reforms that are still pending. They are the introduction of a property title certification system and earmarking of at least 20 to 25 per cent of developed land in all housing projects for the economically weaker sections. In the case of the Property Title Certification System, though Karnataka believes that it has achieved this reform, the MoUD does not concur.

A significant portion of the ULB-level optional reforms have been completed in the JnNURM mission cities. The primary reforms that are pending to be implemented are administrative in nature. Some administrative reforms that have been suggested by the Government of India have however not been implemented fully. These primarily consist of rationalisation of the ULB staff and expenditures. Though it is usual for every Municipal Commissioners to have a term two to three years, the ULBs do not offer the guarantee of the same which is required by the reforms.

Conclusions and Recommendations

The picture that emerges from our evaluation of JnNURM in Karnataka is that contrary to its name the Mission is more an urban development strategy rather than one of urban renewal. Much as a case can be made out for a stronger urban renewal dimension to the Mission, the focus on urban development cannot be scoffed at in a process of significant urbanization. Keeping this wider view of the Mission the experience in Karnataka leads us to the following recommendations:

1. A strategy for intervention in urban Karnataka must move beyond the simple JnNURM classification of Mission cities and small and medium towns, to a threefold classification of urban centres in the state.
2. A separate toolkit must be created for the City Development Plans that are to be made for each category of city or town.

3. A detailed list of heritage sites must be developed in Bengaluru and each of them be marked with a board that not only identifies them as heritage sites but also provides a brief account of why they qualify to be treated as such. In Mysore brief accounts of why individual sites qualify to be considered of value to heritage can be added to the existing boards.
4. Administrative units of the cities must be reduced to viable administrative sizes, while economic plans must be made for several administrative units put together.
5. Government officials must play a larger intellectual role in the formulation of City Development Plans as well the formulation of projects that arise from those plans.
6. There must be greater convergence between JnNURM and economic policies, particularly policies for information technology, biotechnology and manufacturing sectors. As a first step towards such a convergence, a viability gap fund must be created to provide for satellite town projects that involve both industry and real estate developers.
7. Standing-room-only buses at a nominal charge should be introduced within cities at the times when workers go to and return from work.
8. In districts where labour is leaving agriculture buses must be introduced at a nominal charge linking the rural areas with urban centres at times that would help workers go to and return from nearby working places.
9. The government must fix a specific amount of time that can be taken for each task in the implementation of the projects that have potential for avoidable delays. These details must be put up on the relevant websites, along with the actual performance.
10. Basic Services to the Urban Poor must include schemes that directly affect the poor wherever they live, and not be confined to slum dwellers alone.

11. A significant portion of resources set aside for the urban poor through JnNURM or other similar programmes must be allocated to projects that make a substantial difference to the availability of health facilities for the urban poor.
12. The government must consider joint ventures with small landowners of villages that have been recently absorbed into the city to create effective housing for the poor.
13. When judging the efficacy of reforms the government must evaluate not just the implementation of the prescribed reform measures but also the outcomes that the measures were supposed to generate.