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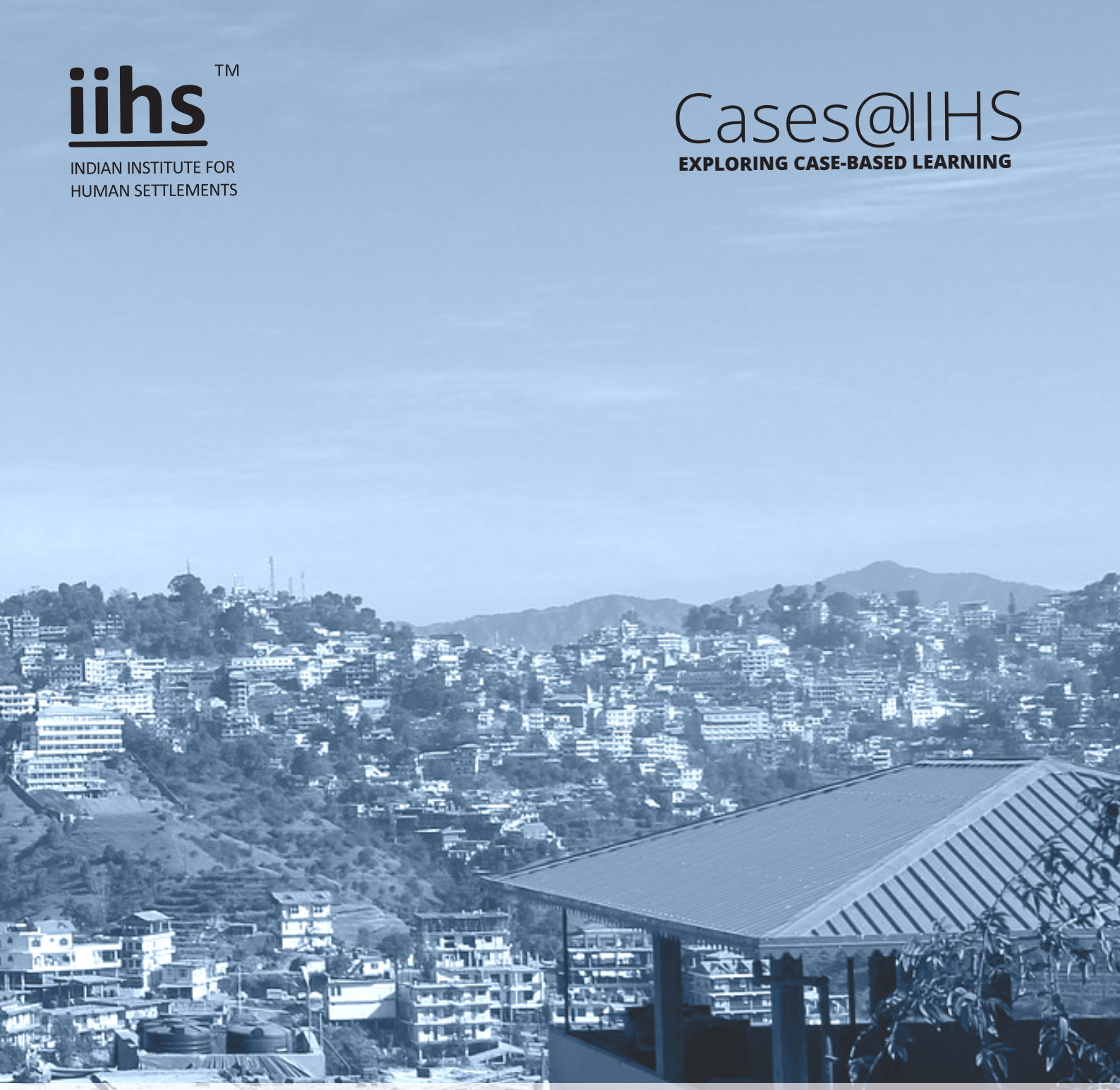

What are the built-in performance setbacks in JNNURM?

Deepak Sanan

A Futile Money Chase: the Story of JNNURM in Shimla

part of
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Case No 1-0011

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The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was received in Shimla like any other new Centrally Sponsored Scheme (CSS)—pressure to comply with the requirements to receive funding under the schemes and attempts palm off additional work to someone else. The only difference between this scheme and the other new CSSs that are routinely announced, was greater interest placed on JNNURM and, therefore, in preparing the ground for accessing funds under it. This was because JNNURM was touted as a mission that would transform the cities included in its ambit (Annexure 1). It was not the objective of creating self-governing cities that engaged attention but the steps laid down to secure approval for project funding and, despite the evident eagerness, implementing these steps took time.

JNNURM was announced in December 2005. An immediate requirement was to designate a state level agency to coordinate scheme implementation. Himachal Pradesh Urban Development Authority (HIMUDA), the state housing and township development agency, was charged with this responsibility. The first step for compliance with scheme conditions was a visioning exercise to be carried out by the cities that would involve all stakeholders and result in the preparation of City Development Plans (CDPs). In order to assist in this process, the Government of India had finalised a panel of consultants to assist the cities in this task. The task of preparing the CDP for Shimla was entrusted to IL&FS Infrastructure Development Corporation Ltd. (IL&FS IDC) in 2006. After holding meetings with the key stakeholders and gathering the required information on the city, the CDP was finalised by the end of 2006 (Annexure 2).

Key features of the CDP included a review of the current status with regard to delivery of basic services, an enumeration of felt needs and on the basis of future growth projections, and an estimation of infrastructure gaps that required investment support. The CDP also included an analysis of the city's governance and financial parameters but the real highlight was the investment requirement of Rs.3678 crore. This amount was projected to be financed by a mix of public and private sources (centre 52.69 per cent, state 12.89 per cent, private sector 32.68 per cent) but in popular imagination this was the central assistance JNNURM would bring to the city!

Once the CDP had been finalised, the next stage was the signing of the tripartite MOA between the centre, state and city governments. This laid out the schedule for meeting the reform commitments (both mandatory and optional) of the state and city governments. The MOA was signed on March 2007 (Annexure 3). This was essential to be able to present the first batch of investment projects for sanction by the national sanctioning committee within that financial year. Detailed Project Reports (DPRs) had already been prepared for a few projects. In the national sanctioning committee meetings held in March 2007, two projects, one related to a road tunnel and bridge and the other to solid waste management were duly approved. In the subsequent years, Shimla secured approval for a number of other projects both under the sub mission on Urban Infrastructure and Governance and the sub mission on Basic Services to the Urban Poor. The final picture of sanctioned projects are shown in Table 1:

Table 1: Projects sanctioned for Shimla under JNNURM

I. Urban Infrastructure & Governance (UIG) (7 Projects)					***(Rs. in Lakh)***
No	Name of Project	Project Cost	Cumulative Release		
			Central Share	State Share	Total
1.	Widening and lowering of existing tunnel near Auckland House School at Lakkar Bazar, Shimla.	1009.06	524.71	100.91	625.62
2.	Setting up of Solid Waste Management system and processing plant at Bhariyal for Shimla town.	1604.00	320.80	160.40	481.20
3.	Rehabilitation of water supply distribution system for Shimla city.	7236.00	1447.20	144.72	1591.92
4.	Rejuvenation of sewerage network in missing lines and left out areas or worn out sewerage in various zones of Shimla.	5474.00	970.00	263.10	1233.10
5.	Purchase of buses for Shimla city	769.56	547.33	152.04	699.37
6.	Establishment of e-governance in MC Shimla.	1120.00	224.00	28.00	252.00
7.	Sanitary Landfill site for Solid Waste Management Plant at village Bhariyal, Tehsil & . Shimla district.	1050.62	210.13	26.27	236.40
	Total	**18263.24**	**4244.17**	**875.44**	**5119.61**

II. Basic Services to the Urban Poor (BSUP) (2 Projects)					
1.	Ashiana-I (252 Flats) a housing scheme for the poor of Shimla town.	999.07	176.36	88.98	265.34
2.	Ashiana-II (384 Flats) (176 HIMUDA and 208 MC)	1401.48	560.59	40.94	601.53
	Total	**2400.55**	**736.95**	**129.92**	**866.87**

A brief on the history of each project, till the end of JNNURM:

1. The project relating to the Lakkar Bazar tunnel and bridge was sanctioned on 19 March 2007 at a cost of Rs.1009.06 lakh. It was slated for completion in two years. The tunnel was completed and inaugurated on 19 April 2012 and the bridge on 20 May 2013. The final cost of the project is still being tabulated but is likely to be close to the original estimate. The project was undertaken by the state Public Works Department (PWD) and the time and cost overruns were limited, compared to other projects executed by the state PWD. The reasons for delay according to the project authorities was that while executing the project, its scope increased and fresh tenders had to be called for the removal and reconstruction of some structures. The original estimate had also not anticipated that certain water pipes and electrical lines would have to be relaid.

2. The project for solid waste management system was sanctioned on 19 March 2007 at a cost of Rs.1604 lakh. It had many components, including measures for improving segregation, collection, transport, and processing but did not include final disposal in a landfill. The project was implemented by the Municipal Corporation (MC) of Shimla. It was projected that the project would be complete in two years, but it took over 7 years and even on 1 August 2014 some work remained incomplete.

The actual expenditure break-up of the components as well as the current operational status of the assets acquired under this project are listed in Table 2:

Table 2: Details of Solid Waste Management Project

No.	Item/Category	Approved Cost (Lakh)	Expenditure as on 21 July 2014 (Lakh)	Extent to which Completed	Balance item/status
A	Bins for storage of waste in segregated form at source (80,000)	24.40	54.97	Completed	Nil (Distributed free to households in the city. Negligible segregation achieved)
B	Primary Waste Collection				
	(i) Capital cost for door to door waste collection by private sector (rag sack, pickup vans etc.)	164.61	121.07	30 pickup vans have been up purchased.	810 rag sacks and trays (hard plastic) yet to be purchased.
	(ii)Street sweeping equipment (implements, safety kits, mop up vans, litter bins, mechanical sweeper)	69.40	8.05	i) 90 Litter bins ii) Brooms, spades and other implements for road sweeping and drain cleaning have been purchased.	i) 810 safety kits ii) Mechanical sweeper and iii) 5 mop up vans yet to be purchased
	(iii) Construction of chutes for collection of waste in inaccessible areas and slum areas (with fencing)	200.00	46.76	Work completed at 6 out of 11 locations	i) Work at 2 sites yet to start. ii) Work in progress at 3 sites .

C	Intermediate storage (construction & maintenance of cement platforms where dumper placer containers shall be placed)	15.00	11.00	Base work completed at 60 locations and 40 garbage collection stations constructed.	20 Garbage collection stations still to be constructed.
D	Transportation vehicles (dumper placers and back hoe loaders)	170.25	165.35	i) 5 dumper placers were purchased. ii) 3 twin dumper placers were purchased. iii) 3 back hoe loaders were purchased. iv) 6 Bolero Campers were purchased.	Nil
E	Inspection Vehicles (two)	9.60	10.30	i) 1 Maruti Gypsy EURO-III was purchased. ii) 1 Bolero vehicle was purchased.	Nil
F	Transfer station, dumper with inbuilt compactor.	289.00	44.49	i) 2 compactors were purchased.	i) 2 hoppers, ii) 2 hook lift systems, iii) 4 transfer containers (20m3) and iv) 2 Truck Chassis yet to be purchased and civil construction yet to be done.

G	Integrated Waste treatment & disposal facility.			Work awarded on DBOT mode to Hanjers Biotech, Mumbai. Against Rs.150 lakhs, Rs.18.15 lakhs were spent on clearance of site. Plant established on 18 June 2013 but the metaling of the approach road is yet to begin. However, even treatment which is not actually operational since concessionaire now finds that the costs of operation are much more than the tipping fee to be paid as per the contract.	
	(i)General Infrastructure	150.00	18.15		
	(ii)In vessel composting plant	450.00	-----		
	Sub Total (I)	**1542.26**			
H	Information education and communication at 0.5 per cent of (I)	7.72	7.72	Amount transferred to SEHB Society for implementation: radio programmes, SMS, banners poster competitions, etc., conducted and amount utilised.	
I	Administrative charges at 0.5per cent of (I)	7.72	21.72		
J	Contingency at 3 per cent of (I)	46.30			
	Total	**1604.00**	**509.61**		

3. Subsequently a project for creating a sanitary landfill at the same location as the waste treatment plant was sanctioned on 12 March 2012 at a cost of Rs.1050.62 lakhs. The current status of this project is that, it has been considered a non-starter project by the Government of India. It was visualised that the execution of this project would follow a public-private partnership (PPP) model. An advertisement inviting an Expression of Interest (EOI) for construction and operation of a sanitary landfill was published on 8 November 2012. The project received only one bid which was opened on 4 January 2013. However, the state government directed that fresh bids be called for, but again, only one bid was received on 6 May 2013 which was the date for opening the bid. The state government sought fresh bids again. Meanwhile, the Municipal Corporation decided to seek directions on whether to seek fresh bids on the original DPR of a landfill for Shimla town alone or remake the proposal on

the basis of a cluster approach (regional landfill for a number of towns) as directed by the National Green Tribunal. Before any decision could be taken, JNNURM came to an end!

4. A project titled 'Establishment of e-Governance in MC Shimla' was sanctioned on 24 February 2012 at a cost of Rs.1120 lakhs. It proposed both hardware and software components to enable a complete information technology platform for the entire range of functions performed by the corporation as well as a citizen interface to seamlessly provide services to residents of the city. The project was to be completed by 31 March 2014. However, by the time JNNURM came to a close, a vendor was still to be appointed and consequently there was no expenditure on the project. The Government of India has recalled the funds disbursed in advance, while the Municipal Corporation is seeking an extension of time to undertake the project.

5. The project for rehabilitation of water supply distribution system for Shimla city was sanctioned by the State Government on 18 July 2009 at a cost of Rs.72.36 crore. The project for rejuvenation of sewerage network in missing lines and left out areas and worn out sewerage in various zones of Shimla was sanctioned by the State Government on 15 December 2010 at a cost of Rs.53.02 crore. The implementation agency was the State Irrigation and Public Health Department which has traditionally been responsible for the creation of all water supply and sewerage assets for Shimla city. It is also responsible for bulk water supply and the operation and maintenance of the Sewage Treatment Plants (STPs) setup below different zones of the city. The Department conceived the two projects with the following objectives:

Rehabilitation of water supply distribution system for Shimla City:

- Rehabilitating water supply distribution system and providing connectivity with additional storage tanks.
- Rejuvenating the Dhalli and Cherot catchment area gravity schemes.
- Strengthening the existing Craignaino and Sanjaulli supply mains.
- Strengthening the clear water sump at Ashwani Khad and de-silting of storage and sedimentation tank at inlet of Ashwani Khad.
- Installing an ozonisation plant to disinfect 10 MLD water at Ashwani Khad.
- Automation and central monitoring.

Rejuvenation of sewerage network, rehabilitation of missing lines, worn out sewerage and left out areas in various zones of Shimla City:

- Rejuvenating the sewerage network and existing Sewerage Treatment Plants (STPs).
- Rehabilitating the missing lines where branch sewers have not been laid in MC area.
- Rehabilitating worn out sewerage system coverage in MC area.
- Providing sewerage facilities to those areas in the city of Shimla where such facilities, although required, did not exist previously.

The project for Rehabilitation of Water Supply Distribution System for Shimla City had the following components**:**

Table 3: Details of Drinking Water Supply Project

No.	Component	Provision (in Lakh Rupees)
1	Providing and laying distribution system in existing zones i.e., Dhalli, University, Chakkar, Bharari, Kamanadevi, Mansfield, Sanjauli, BCS, Ridge, High Court, Vice Rigal, A.G.Office, Totu, Kasumpti.	3375.85
	GI Pipe Dia 65mm to 150mm 118.76 km	
	MS Pipe Dia 80mm to 400mm 52.951 km	
2	Replacing pumping machinery at existing pumping station i.e., Gumma, Chair, Ashwani Khad, Boileuganj, Snowdon.	609.19
3	Strengthening the Craignano-Sanjauli pipe line	979.54
	MS Pipe Dia 500mm to 700mm 10.10 km	
4	Strengthening the Dhalli Catchement	998.06

	Area	
	GI Pipe Dia 65mm to 100mm 0.70 km	
	MS Pipe Dia 150mm to 350mm 25.49 km	
5	Strengthening the Cherot catchment area	402.04
	MS Pipe Dia 150mm to 250mm 5.90 km	
6	SCADA & Automation	206
7	Replacing the Sanjauli-Ridge-Chakkar pipe line	420.94
	GI Pipe Dia 150mm 1.66 km	
	MS Pipe Dia 250mm to 500mm 7.45 km	
	Total	**6991.62**
	Add 3 per cent contingency charges	209.75
	Add 0.50 per cent administrative charges	34.96
	G Total	**7236.33**
	Say	**72.36 crore**

The main components of the Rejuvenation of Sewerage Network, Rehabilitation of missing lines, worn-out sewerage and left out areas in various zones of Shimla city were as follows:

Table 4: Details of Sanitation Project

No.	Name of component	Provision (in Lakh Rupees)
1	Rejuvenation of sewerage network and STP's, rehabilitation of missing lines and worn out sewerage in existing zones i.e., Lalpani, Summer Hill, North disposal (Sub Zone-I), Dhalli (Sub Zone-I), Sanjauli Malyana (Sub Zone-I) & Snowdon	
	i) C/o Drying beds	
	ii) Centrifuge filter press	
	iii) Rehabilitation of existing UASB.	
	iv) Gen set 100 KVA 6 Nos	1328.83
	v) Lab equipment	
	vi) Energised tube well power pump	
	vii) Sewerage network 150mm dia 1817 m	
	viii) Gravity main 10200m	
	ix) House connections 400 Nos	
	x) C/o Metelled road	
	xi) Land acquisition	
2	C/o New STPs and laying of distribution system in left out area in various Zones i.e., Sanjauli Malyana (Sub Zone-II Mehali), Jutog and Totu.	3793.54
	i) C/o 3 Nos STP (0.20MLD, 2.00 MLD, 1.00 MLD)	
	ii) Gen set 3 Nos (100 KVA, 60 KVA, 60KVA)	

	iii) Lab equipment	
	iv) Land acquisition	
	v) Sewerage network 51851 m	
	vi) Tube well power pump	
	vii) House connections 3539 Nos	
	viii) C/o Metelled road	
	ix) Pump chamber & staff quarter	
	Total	**5122.37**
	Add 3 per cent contingency charges	153.67
	Add 0.50 per cent Administrative charges	25.61
	G Total	**5301.65**
	Say	**53.02 crore**

Project implementation was stalled soon after sanction. Both projects were conceived by the department following a traditional model of infrastructure creation without considering the current utilisation of existing assets or with a larger vision of improved outcomes. The state Urban Development Department (UDD) wanted to reformulate the objectives of the projects to supplying water 24 hours every day for the entire city and to ensure complete treatment of all waste water generated by the city. Moreover, the UDD wanted this not be conceived as a construction project but as a concession agreement with the private sector that involved both construction and Operation and Maintenance (O&M)for the life time of the projects. This change meant that the projects would undergo an overhaul to prepare appropriate documents to invite private sector participation in a manner that would meet the objectives of 24 hours water supply and 100 per cent waste water treatment while ensuring that the consumer would pay a politically acceptable tariff (user fees). These objectives would also need to reconcile the requirement that the revenue risks of the private sector partner were adequately covered. At the same time, the project design had to ensure that there was no scope for dilution of responsibility of the private partner for the stated objectives and the private partner's incentives were such that it would aim to secure these objectives in the least possible time and in the most cost effective manner. The project expenditure would no longer be payments to be disbursed during a short construction period but would stretch beyond the time that the JNNURM was

envisaged to last. The design would, therefore, also need to be accepted by the Government of India.

The UDD began initial consultations in this regard in 2010. To prepare the bid documents for this concept, IL&FS were appointed as consultants. After extensive consultations, the bid documents were finalised (Annexure 4). However, the proposal took time to secure cabinet approval. Finally, the proposal moved to the stage of inviting bids. It was held up again because of inadequate interest shown by bidders. Ultimately, in 2013, the idea of private sector partnership was abandoned and it was decided that the traditional route of a construction contract would be followed. However, by the time, further action could be taken in the matter, JNNURM came to an end. The state government has sought extension of time to allocate funds for a new scheme to lift water for Shimla from the new Kol Dam (which has been recently constructed on river Satluj) and to make the already proposed additions to the sewerage system.

6. Purchase of buses under JNNURM was a special scheme introduced in the aftermath of the financial crisis of 2007. It had a two-fold objective—to function as a growth multiplier by assisting the automobile industry and to improve public transport in cities. The scheme conditions included the requirement for a dedicated city bus service by a separate city level entity. In Himachal Pradesh, this condition was difficult to comply with since the state-wide road transport corporation (HRTC), operated bus services in Shimla as well. A separate society was set up under the HRTC to 'own' the buses. A scheme for purchase of 75 mini buses was sanctioned. These were delivered in 2009. The grant funding (80 per cent from Central India and 20 per cent from the State Government) was received in two installments of Rs.3.04 crore on 5 March 2009 and of Rs.2.43 crore on 12 November 2010. These buses are being operated by the local unit of HRTC by opening a separate profit and loss account under a society named Shimla Urban Transport Society (SUTMS), which was constituted and registered on 5 December 2009.

7. Under the sub mission of Basic Services to the Urban Poor, two schemes were sanctioned. A scheme called Ashiana I was sanctioned on 21 July 2007 at a cost of Rs.999.07 lakhs. The scheme envisaged construction of 252 dwelling units for the urban poor. The site chosen initially was in the Tutu area of Shimla and it was projected that construction would be completed in one and half years. The project could not be started at Tutu since the site was forest land and permission for diversion to use for housing could not be obtained. Another site was located in Dhalli, an area in the town by the end of 2010. On 21 May 2011, it was decided that MC Shimla should be responsible for construction instead of HIMUDA which was the agency originally designated. At this stage, a PIL was filed in the High Court, questioning the geological suitability of the selected site. Following the Court's directions, the state geologist was asked to submit a report about the site. Thereafter, the structural design was

prepared. The drawings were technically approved on 14 February 2012 and sanctioned for Rs.1409 lakh. The project was then put out to tender but the lowest bid received, at Rs.1741 lakh, was considered too high. Fresh tenders were called but no bids were received. Since it was clear, the project would require additional funding (beyond the sanctioned amount), the MC asked the state government to bear the additional cost. The state government, however, was not willing to allocate more funds and asked the MC to identify an alternative, lower cost site. Since no other land was available, the MC agreed to bear the additional cost and decided in August 2013 to tender the work afresh. However, various civil society organisations and some of the elected councillors sought for a change of location again. After some discussions, the MC again invited bids on 12 February 2014 but did not receive a response. With JNNURM coming to an end, the project has remained a non-starter and a request has been made to allow a diversion of the sanctioned amount to another centrally sponsored scheme called the Rajiv Awas Yojana (RAY).

A scheme called Ashiana II was sanctioned on 27 February 2008 at a cost of Rs.1401.48 lakhs. The scheme envisaged construction of 384 dwelling units with completion projected in a span of one year. The project execution was divided between the HIMUDA (176 dwelling units) and MC Shimla (208 dwelling units). Both sub-projects were located in the Dhalli area of Shimla. The HIMUDA managed to start construction soon after project sanction and handed over 40 units to the MC Shimla on 28 June 2013. In early 2015, the status of construction of the 176 units with HIMUDA was that 88 units were complete, 30 units were reported to be 90 per cent complete and the remaining 58 units were at a lower stage of completion. However, it is reported that these 58 units and the 24 units already completed fall in the area finalised for making four lanes on National Highway 22 and will have to be demolished. Allotment of the remaining completed units is yet to be done although some rules have been framed in this regard. The position of the 208 units to be constructed by MC Shimla is similar to that of the Ashiana I project. The project was technically sanctioned for an amount of Rs.14.53 crore on 29 May2012 and put out to tender. The lowest bid received was of Rs.18.51 crore. Fresh tenders were called for again and the lowest bid received was of Rs.17.14 crore. This was also not accepted. In February 2013, it was decided to identify suitable alternative land for the project. However, this could not be done by the time JNNURM came to an end.

A review of the investment obtained directly through JNNURM shows that the city finally received Rs.49.81 crore from the Centre over the nine year period and out of this, the Government of India is seeking recall of at least Rs.30.28 crore since the concerned projects were ‘non-starters’. Of the balance amount, Rs.8.68 crore was spent on assets with a rapid depreciation rate such as vehicles and dustbins. The processing plant set up in PPP mode as part of the SWM system for safe disposal is non-functional. It is certain that in the medium term, the only JNNURM assets that will

survive will be the tunnel and bridge project and the 94 housing units that will be completed. Against the Rs.1938 crore of central aid, the final figure may be only Rs.15.83 crore (less than 1 per cent), an amount that would be paltry even for a less hyped CSS.

There was precious little investment in improving the city through JNNURM and in fact, the city gained more from investments outside the JNNURM in this period as shown in Table 5.

Table 5: Increase in the Asset Base of Shimla City between 2006 and 2013

No.	Sector & Scheme	Funded through central assistance under JNNURM	Funded through other Sources
1.	Water Supply: A new scheme to lift water from river Giri	-	Rs.70.57 crore
2.	Sanitation		
3.	Solid Waste Management related assets	Rs.3.21 crore	
4.	Roads (one tunnel/bridge project)	Rs.5.25 crore	
5.	Public Housing stock (94 usable dwelling units)	Rs.7.37 crore	
		Rs.15.83 crore	Rs.70.57 crore

JNNURM set out to create sustainable, self-governing cities which were responsible for their own future. For this purpose, investment support was predicated on progress, on reforms desired by the JNNURM. Reforms were meant gauge the extent to which necessary action for meeting the objective of self-governance and financial sustainability had been taken. Overall, the performance of the state of Himachal Pradesh and the city of Shimla have been exemplary, going by the reform scorecard given by the Government of India (Annexure 5). With an overall state performance evaluated at 91.7 per cent on reforms (Calibrated Milestones and Scores), Himachal Pradesh ranked fifth among all states of India. The desegregated performance on the Urban Local Body (ULB) level and state level mandatory reforms and optional reforms (at state and city level) was 76.67 per cent, 100 per cent, and 95 per cent respectively. Comparing this to the situation on the ground, reflected the inability of the scoring

system to either capture the 'real' position or to distinguish between the cosmetic paper based reforms and meaningful ones.

The Government of India monitoring formats and evaluation show that Himachal Pradesh has scored 100 per cent on mandatory state level reforms. This should mean that the city has been conferred responsibility for all the 18 functions listed in the 12th Schedule of the Constitution and assigned all city planning and service delivery functions. In addition, effective community participation should be a reality. In practice, there was virtually no change in the responsibilities devolved on the corporation for various functions between 2005 and 2006, and 2013 and 2014. In the case of water supply, bulk supply continued to be a responsibility of the concerned state government department. Sewerage continued to be (mis)handled by the concerned state government department. Major roads continued to be a responsibility of the state Public Works Department. Education and Health remained wholly state government responsibilities. The Municipal Commissioner continued to sanction building plans subject to clearance of the State Town and Country Planning Department, with appellate and overriding powers vested in the State Government. The sense of a corporation functioning to deliver only a few of the key services in a city (solid waste management, maintenance of a few roads and retail distribution of water supply) remained in place, even as all the relevant check boxes were ticked to show the creation of a self-governed city responsible for delivering all basic services. In effect, the scoring on the reform effort reflected a totally cosmetic exercise which was sufficient to garner a cent percent score.

Reforms at the ULB level was a shift to a double entry accounting system, earmarking budgets for services to the poor. Showing budgetary provision of services to the poor and some internet based bill collection was enough to secure a 67 per cent score for Shimla. Even the poor achievements on more significant issues of property tax and user charges (that really impact the financial sustainability of the city), crossed a score of 75 per cent.

At the launch of JNNURM, the property tax system in Shimla was based on historical capital costs and annual rental value, with significant exemptions for various categories. The enumeration of properties for taxation listed only 8500 properties in Shimla. Total demand in 2005–2006 was Rs.5.61 crore and collection was Rs.4.06 crore (72 per cent). As a part of the reform effort, fresh property enumeration was mooted based on Geographical Information System(GIS) mapping. An Ahmedabad based agency, Planning and Resources on Urban Development Affairs (PRUDA), was commissioned for this purpose on 20 June 2010 and the contract envisaged the work to be completed within six months. The work is yet to be completed (accuracy verification and authentication of survey work are still pending). The second leg of property tax reform was a shift from the traditional system to a unit area method with no exemptions. This required an amendment in the Municipal Corporation Act. After

considerable debate and discussion, the amendment was finally enacted by the state legislature in 2011 to shift to a unit area basis with freedom for the Corporation to set rates at its own level. In the Municipal Corporation elections held in 2012, the shift in property tax system became an issue. The CPM won the directly elected posts of Mayor and Deputy Mayor and one of the party's promises was that it would revert to the traditional system of property taxation. The party, therefore, desisted from taking any action to implement the new system mandated by the law. Requisite regulations were not framed for this purpose and no tax was collected. A case was filed in the High Court in 2013 questioning this holding of property tax collection in abeyance since the adoption of the new law mandating a new basis for taxation. The High Court after hearing the matter, allowed the corporation to apply for an extension of time to frame bye-laws for collection, levy and assessment of property tax based on the unit area method and asked them to collect taxes based on the old system for the years 2012–2013 and 2013–2014. The court finally ruled in 2014 that the new system would have to be implemented. Consequently, new bye-laws have been notified in February 2015 (Annexure 6). The MC Shimla has now started property tax assessment and collection on the unit area method and property owners are filing their property tax returns on the basis of self-declaration. The property tax bills are also being issued on Unit Area Method for the year 2014–2015 and 2015–2016. However, the collection efficiency of the corporation is still a matter of concern. In 2013–2014, when the property tax was collected following the old pattern from the almost 10,000 properties listed for taxation purpose, the tax demand was Rs.7.75 crore and collection Rs.5.15 crore (66 per cent). In other words, the efficiency of collecting property tax declined in the period that the JNNURM was implemented.

The MC's most important user charge is in the area of water supply and sanitation. The MC collects water charges from private connections at separate rates for domestic and commercial use. In 2005–2006, the user charges based on cascading rate slabs for increasing consumption were Rs.4.24 up to 30,000 litres, Rs.6.05 from 30,000 liters to 75,000 litres and Rs.9.08 above 75,000 litres per month for domestic consumption and Rs.18.15 per kilolitre up to 30,000 litres, Rs.24.20 from 30,000 to 75,000 litres and Rs.33.28 above 75,000 litres per month for commercial connections. (For sewerage, there was no user charge in 2005–2006). The total number of domestic and commercial connections were 20,281. While the user charges were based on volume of consumption, in practice, almost all billing was on an assumed consumption basis since meters could not be relied upon for accurate reading. In 2005–2006, the total user charge demand was Rs.5.68 crore and collection was Rs.4.75 crore (83.63 per cent). In 2013–2014, there was one tariff for domestic connections fixed at Rs.9.03 per kilolitre and for commercial connections, the rates were Rs.38.95 per kilolitre up to 30,000 litres and Rs.51.91 for over 30,000 liters of consumption per month. In addition, there was a sewerage charge levied at the rate of 15 per cent of the water consumption bill. The total number of connections were 21,754 (domestic) and 6464

(commercial), the demand was Rs.14.43 crore and collection Rs.12.31 crore (85.30 per cent) User charge tariff revision had taken place during the JNNURM period (basically for the electorally less sensitive commercial establishments) and the collection efficiency showed a marginal improvement. However, billing continued to rely on assumed consumption and it was difficult to estimate to what extent water was delivered and charged for, in reality. Overall no system improvement had taken place.

The absence of a sense of responsibility (to become a sustainable entity) is starkly visible in the financial performance of the city. In 2006–2007, the difference between the city's own tax revenues and user charges on the one hand and its revenue expenditure (net of depreciation and write offs) on the other hand, was about Rs.19 crore. This had widened to over Rs.39 crore in 2012–2013. Table 6 shows the increase in the financial difficulties of the city during the JNNURM period. Over this entire period, the city was consistent in running a revenue deficit that lowered its net worth. The Municipal General Fund declined by almost Rs.100 crore in the period between 2006 and 2013. In cash terms, the deficit was financed by mounting sundry creditors, comprising largely of the amount owed to the state government's irrigation and public health department which supplied the bulk water and ran the sewage treatment plants for the city. The state government had failed to hand over this responsibility to the city despite the JNNURM reform requirements and the city had capitalised on this failure by evading its own responsibility for fiscal prudence. (Annexure 7).

Table: 6 Financial Performance of MC Shimla during JNNURM Period

Sl.No.	**Indicator**	**Amount (in Rs.)**
1.	Increase in the amount of own tax revenues and user charges in 2013 compared to 2006	15.36 crore
2.	Increase in amount of revenue expenditure (net of depreciation and write-offs) in 2013 compared to 2006	35.72 crore
3.	Cumulative revenue deficit from 2006 to 2013	201.52 crore
4.	Cumulative reduction in municipal general fund between 2006 and 2013	99.28 crore
5.	Cumulative depreciation provision between 2006 and 2013	112.49 crore
6.	Increase in sundry creditors from 2006 to 2013	107.86 crore

Shimla's financial performance during the JNNURM period reflected a business as usual situation. The performance on key service delivery indicators, measured against outcomes was similar (although for city residents, the situation appeared to show some improvement) as the table below shows:

Indicators at the Beginning and end of JNNURM Period:

Table 7: Shimla: Comparative Performance on Important Service Delivery

Sl. No.	Service	Indicator	2005	2014
1.	Water	i) Per capita per day bulk production	2013	220
		ii) Hours of supply	Between 0.75 to 1.5 hours	Same
		iii) Losses	Approximately 50 per cent	Same
		iv) Connected Households	18045	21754
2.	Sanitation	i) Capacity utilisation of STPs (35.63 MLD)	3.10 MLD	9.60 MLD
		ii) Estimated waste water treated	Approximately 11per cent	30 per cent
		iii) Connected Households	8963	11069
3.	SWM	i) Households covered (Collection)	Approximately 5000	35000
		ii) Safe Disposal (Percentage)	Nil	Nil

In water supply, the proportion of connections and households remained more or less static—48 per cent of households (total households: 37,756 as per 2001 census) in 2005 and 47 per cent of households (total households: 46,306 as per 2011 census) in 2014. However, in the case of solid waste management, households covered for primary collection grew significantly from less than 13 per cent to over 75 per cent. In

sanitation, the percentage of households covered remained more or less the same (at just under 23 per cent), (although the actual waste water treated did grow significantly as per the department figures, there was no explanation for the difference). Conversely though, both in water supply and solid waste management, the performance on key outcomes reflected little change. Thus hours of supply and per capita availability of water remained more or less unchanged. In solid waste management, safe final disposal remained nil.

In effect, issues of public convenience received some attention. These basically related to demand for primary collection of solid waste. In drinking water, shared connections are a norm in much of Shimla and the proportion of households connected does not necessarily reflect a lack of access. However, connection to the sewage network showed little progress. Possibly, this was a reflection of the fact that this was not really a matter of concern for people since they already possess the convenience of toilets linked to septic tanks. The fact that the septic tanks are emptied in an unsafe manner in the entire city is not a matter of concern in the public mind. Overall, the lack of concern with final outcomes in all three areas, is striking. Understanding of the link between public health, uninterrupted water supply, treatment of all waste water (and human waste) and safe disposal of all solid waste is either absent or does not appear to result in targeting the latter as the goals of service delivery. Convenience alone appears to be of concern to the public, officialdom, and elected representatives. The 13th Finance Commission attempted to alter this by linking incentive grants to putting in place a reporting system on service delivery indicators (including both base lines and annual targets for improvement). Unfortunately, the actual reporting on these formats does not reflect a serious exercise but a perfunctory adherence to meet the requirement to avail of grants (Annexure 8).

The expected outcomes of the JNNURM were outlined in the following form:

1. Modern and transparent budgeting, accounting and financial management systems will be designed and adopted for all urban services and governance functions.
2. City-wide framework for planning and governance will be established and become operational.
3. All urban residents will be able to obtain access to a basic level of urban services.
4. Financially self-sustaining agencies for urban governance and service delivery will be established through reforms to major revenue instruments.
5. Local services and governance will be conducted in a manner that is transparent and accountable to citizens.
6. e-Governance applications will be introduced in core functions of ULBs and Parastatal resulting in reduced cost and time of service delivery processes.

Clearly these outcomes were not achieved in Shimla and whatever progress was made had little to do with JNNURM implementation.

Overall what accounts for the failure to meet JNNURM objectives and create a self-sustaining city that delivers on what ought to be a core goal: well-functioning basic services?

The perceptions of various stakeholders with regard to the scheme and service delivery outcomes offer some clues in this regard. JNNURM was basically seen as a scheme that was to bring large amounts of money to fund the infrastructure requirements of the city. Its failure to do so was seen to be a result of the meager allocations, complicated conditions attached to the funds and lack of capacity and motivation in the state and city to fulfill the conditions and draw the funds.

There is an implicit assumption that the city cannot marshal the resources to finance its requirements. Making these funds available is the responsibility of the Centre and the State. Shimla's core needs in basic services continue to be seen as additional capital projects and not a better utilisation of what is already available. Thus a new water supply scheme to produce more water is a priority. The fact that if the existing 50 per cent wastage in drinking water supply was reduced to acceptable levels, Shimla has more than enough water to cater to its size in the foreseeable future but this is not really accepted as a solution by any stakeholder.

A significant part of the reason for what may seem an unreasonable view is the huge deficit in current service levels. How can a city that allows water to flow in its pipes for an hour a day (and sometimes only once in three days) ensure adequate water at all times and for all, by merely plugging the leaks in its pipes? Another reason is that city does not really believe in the objectives of these basic services of water and sanitation. The concept of 24 hour water supply is a utopian goal projected by donors, academics and others not in touch with reality. Even the concept of what 100 per cent safe disposal of human and solid waste means, is not understood by almost everybody, leave alone the necessity of such a goal. Even for those sections which might recognise the need for 100 per cent safe disposal, achieving this goal, given the current abysmal levels, is also utopian. All these are considered well beyond the city's grasp because of a lack of faith in the capacity of its leadership and implementation machinery.

The centralising tendencies inherent in India's development strategy have a lot to do with the challenge posed with respect to the creation of self-sustaining cities responsible for themselves. The emphasis on following directions from higher authority on what should be done and on funding new schemes and projects at the expense of maintaining and operating what already exists, orients the behaviour of both state and city officials accordingly. Even a laudatory goal like furthering responsibility and accountability at city level, through increased decentralisation as a condition for release of funds, remains distant in practice, even as check boxes are

ticked to reflect achievement.

There are no specific evaluations of JNNURM implementation in Shimla to draw on and see how other observers have viewed this issue. However, there are larger, more extensive evaluations of JNNURM as a whole, which analyse performance and discuss both constraints and make suggestions for improvement. The Government of India commissioned an appraisal of JNNURM by consultants Grant Thornton India, which was presented in March 2011. The appraisal was aimed at finding out whether the overall objectives of the mission had been fulfilled as well as identifying the constraints in implementation and requisite remedial measures. The appraisal was based on visits to sample mission, non-mission cities, and secondary information from discussions with various stakeholders. (The sample city visited included Shimla although no separate review of the city is available). This evaluation appeared to perceive JNNURM primarily as an investment programme aimed at projects for infrastructure development and constraints were viewed from the angle of what prevented this objective from being realised. Insufficient capacity to prepare projects, procure services, secure clearances at different levels and actually execute projects, were the major constraints. On the other hand, the flow of funds was inhibited by reform conditions and excessive number of installments. The approval process failed to ensure financial closure including leveraging of additional funds. The study also pointed out that there was insufficient attention to understanding service delivery issues and their improvement. It was felt that professional cadres of municipal employees, citizen charters and other city level systems would help enhance capacity and scheme implementation. From a future design angle, the study suggested that the CDPs should be made a component of city's Master Plans, as a statutory vision document to be revised regularly and not to be seen as an instrument to receive programmatic funding. It also wanted an improvement in the DPRs with a project focus on basic services (Annexure 9).

The Comptroller and Auditor General of India carried out a Performance Audit of the JNNURM and the results were published in the Report of the CAG for the year ending 31 March 2012. This performance audit highlighted deficiencies on both the reform and project implementation side. The report pointed out that 'all the mandatory and optional reforms were not implemented as per the commitments made in the MOA. Thus the objective of bringing about reforms in institutional, financial and structural governance structure of the ULBs to make them efficient, accountable and transparent could not be achieved as had been envisaged'. On the investment end, the audit brought out that deficient preparation and appraisal of detailed projects, non-availability of land, escalation in costs, change in design and scope, poor contracting and procurement procedures. In the housing component flaws in beneficiary selection, detracted from securing the envisaged gains. The CAG audit recommendations included better structuring of incentives for reform implementation, more emphasis

on capacity building in financial matters and human resources, improvement in fund flow mechanism, more attention to monitoring to tackle delays and proper beneficiary selection in housing (Annexure 10).

Both, the consultant's study and the CAG report largely concentrated on implementation issues with some attention to the design flaws in JNNURM (and indirectly on the incentives dictating behaviour at centre and state level) that led to the wide gap between the projected goals and reality. Two brief analyses by other observers delve deeper, in order to explain shortcomings and suggest remedies. Yamini Aiyar and T.R. Raghunandan writing in the Mint (7 July 2014 JNNURM: Co-operative Federalism Lessons) focussed on the reform side of JNNURM objectives. They point out that while reform conditions were meant to dictate fund release, in practice spend pressure at the centre led to an acceptance of a pro forma ticking of the reform check boxes by states and cities. There was no ownership of reforms aimed at creating empowered self-sustaining cities at the recipient end and securing mission funds was the sole objective. Aiyar and Raghunandan seek a new architecture in scheme design that loosens central control and allows state level autonomy in decision making (which they feel will promote ownership of reform). At the same time, they would like central schemes to include an innovation fund component which would give top up grants for state specific reform efforts. They also argue for a shift in the centre's role to measure performance (Annexure 11).

Another evaluation of JNNURM by Ravikant Joshi ('JNNURM Quarter Full Glass' in Quarterly Urban Sanitation Magazine, April–June 2012) has examined the JNNURM from both the infrastructure investment angle and the reform objective. It notes that JNNURM has shown both poor utilisation of funds as well as inadequate progress on reform implementation. Joshi, like the others, also highlights lack of capacity at all levels for project preparation and implementation. In addition, he points out that the failure of cities to raise their own resources (or be given a normative resource envelope from the state level) and become credit worthy entities that access capital and debt markets, have constrained infrastructure projects. Joshi highlights both the operational shortcomings that became evident as spend pressure forced short-circuiting of quality and procedure requirements, as well as the on paper adherence to reform as imposed by the design features. Joshi's suggestions for improving the design of a future scheme includes a delinking of the project funding and reform requirements. On the project side, he favours a two stage approval that includes an 'in principle' phase followed by a DPR that ensures a tying up of all ends including land, clearances, and financing. On the reform side, he proposes a reduction in reform requirements, front loading critical reforms (that must be achieved for acceptance under the scheme) and assessment and rewarding of service delivery improvements (Annexure12).

The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) launched by the Government of India on 25 June 2015 appears to have accepted all the major recommendations of the evaluation studies of its predecessor programme. AMRUT is explicitly focussed only on basic urban services, targets service delivery outcomes and recognises the importance of capacity and reforms to secure success in mission objectives. It separates the reforms and the investment windows, creates a two stage process for investment approval, makes fund allocation normative and definite, gives greater autonomy to states in decision making and provides specifically for capacity building. AMRUT would appear to have addressed the shortcomings that afflicted JNNURM in the perception of most observers (Annexure13).

Having considered the outcomes shown by JNNURM and the various evaluations of the scheme, one obvious question begging an answer is—could a change in the design of JNNURM have made a difference? With the launch of the new mission, a second set of queries become self-evident—is AMRUT then a harbinger of good times for urban India? will it be able to tackle the spend pressure that was identified as the major villain in the earlier mission? will it create a new set of incentives to guide the behaviour of various stakeholders? will the focus really shift from the current ineffectual money chase to delivering services?

The literature on design principles of specific purpose intergovernmental transfers and the Indian experience, would be of assistance in this regard. Most writing on fiscal federalism and intergovernmental transfers in India has been concerned with vertical sharing of revenues between the centre and states. Writing on centrally sponsored schemes has tended to look at implementation issues but seldom attempted to correlate design and outcomes. Annexure 14 contains some attempts at looking at the design issues of specific purpose transfers in India both in general and in some specific sectors. The reading list attached to this case contains other examples of output linked transfers in the recent Finance Commission Reports. There are also examples of good practice, both in the urban sector and outside that offer glimpses of what could multiply if scheme designs offered the right incentives to focus on outcomes instead of dictating the inputs and processes that should be followed.

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