



GOVERNMENT OF ODISHA

**User Charges Advisory for
Urban Local Bodies in Odisha
2012**

HOUSING & URBAN DEVELOPMENT DEPARTMENT

EXECUTIVE SUMMARY

The municipal bodies invariably face the problem of inadequate resources to meet recurring expenditure and investment needs for delivering public services. There is an urgent need to rationalize the existing user charges and start levying such charges where they do not exist; in such a manner that the full cost of O & M as well as recurring cost of the service including cost added because of inflation is recovered. Among other things, rational user charges will recover cost and financially strengthen the ULBs to provide quality services on sustainable basis. It will also help them in generating surplus for expanding or upgrading a service and provide service from the service user perspective.

Full cost recovery against public services comes under the mandatory ULB level reform under JnNURM and has been amply emphasized by the 13th Finance Commission. Along with cost recovery, the Commission has focussed on standardization of public services delivered by the municipal bodies.

However, levying user charges need to be accomplished with utmost care so as not to pass on the cost of present inefficiencies in the services to the service users. The user charges must be fixed in such a manner that the objectives of cost recovery, economic efficiency, equity, affordability, resource conservation, acceptability, simplicity, feasibility and transparency can be adequately balanced. Additionally, there is a need to protect the interests of the urban poor and other vulnerable groups through lifeline tariff mechanisms and cross subsidies drawn from other sources; for instance, commercial advertisements.

Upward revision of the user charges is a must if the same is underrated in comparison to the cost as well as quality of a particular service rendered by the ULB. In most of the cases, user charges were fixed by the ULBs long ago, which have not been revised since and do not match with the current market prices. In all such cases, the ULBs have to forthwith revise the user charges. However, in all other cases, there are ways to achieve the objective of full cost recovery, other than mere increase in the user charges. The formulas and figures given in the advisory are only indicative in nature and it essentially depends on the ULB concerned to work out them on the basis of feasibility and local needs.

It is mandatory for all ULBs to commit to user charges reform with immediate effect and ensure full recovery of O&M costs, including inflation induced cost. The State Government has made commitments to the GoI for implementing user charges reforms for full cost recovery of public services. Although the ULB concerned will work out in detail to levy and rationalize user charges to meet cost recovery and service standards goals, full cost recovery is mandatory for all the ULBs in the state from the year 2009-10; on which various grants are going to be linked. All ULBs must fully implement user charges reforms for 100 per cent cost recovery by the year 2010-11 and 2011-12.

In this context, the present advisory will work as a ready reference for the individual ULBs in Odisha to make road maps for successfully fulfilling the twin objectives of full cost recovery and improving service delivery standards.

ABBREVIATIONS

ALM: Advanced Locality Management
BMC: Bangalore Municipal Corporation
BMC: Berhampur Municipal Corporation
BMC: Bhubaneswar Municipal Corporation
BOOT: Build-Own- Operate-Transfer
BOT: Build-Operate-Transfer
BSEA: Brigade Shops Establishments Association
CBOs: Community Based Organizations
DMA: Director, Municipal Administration
FA: Finance Advisor
Gol: Government of India
GoO: Government of Odisha
H & UD: Housing & Urban Development
HH: Household
JNNURM: Jawaharlal Nehru National Urban Renewal Mission
KMC: Kolkata Municipal Corporation
M: Municipality
MC: Municipal Corporation
MoA: Memorandum of Agreement
MoU: Memorandum of Understanding
MSW: Municipal Solid Waste
N: NAC (Notified Area Council)
NGOs: Non-Government Organizations
O & M: Operation & Maintenance
OVIs: Objectively Verifiable Indicators
PMU: Programme Management Unit
PPP: Public Private Partnership
SLNA: State Level Nodal Agency
UCh.: User Charges
ULBs: Urban Local Bodies

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HOUSING & URBAN DEVELOPMENT DEPARTMENT

NOTIFICATION

The 25th June, 2012

No. 17854-Reforms-UR-34/2012/HUD.—Government of Odisha have been pleased to notify herewith the Advisory for Urban Local Bodies of the State for levy of appropriate user charges towards recovery of operation & maintenance costs for various services provided by them to the citizens as required under the Reform mandate under the 74th Constitutional Amendment Act, recommendation of the 13th Finance Commission, and Jawaharlal Nehru Urban Renewal Mission (JnNURM) guidelines, which are mandatory for implementation at the level of Urban Local Bodies.

2. The Urban Local Bodies of the State are empowered to impose the User Charges as stated above as per Chapter-XIII of Orissa Municipal Act., 1950 and Chapter-XIII of Orissa Municipal Corporation Act., 2003.

3. The Urban Local Bodies of the State are encouraged to fix the User Charges for specific services provided by them from time to time with the approval of the elected Councils basing on the principles and criteria enunciated in the Advisory appended to this notification.

By Order of the Governor

INJETI SRINIVAS

Principal Secretary to Government

1. BACKGROUND

The municipal bodies of Odisha deliver a number of citizen-centric services such as managing solid waste; drainage facilities, providing recreational and parking facilities; installing and operating street lights; construction and maintenance of roads. They invariably face the problem of inadequate resources to meet recurring expenditure and investment needs for delivering these services. There is a growing need to innovate, especially in the context of declining state and Central Government's financial support to ULBs, to make such services self-sustainable and improve service standard. There is an urgent need to rationalize the existing user charges and start levying such charges where they do not exist; in such a manner that the full cost of O & M as well as recurring cost of the service including cost added because of inflation is recovered. Since Property Tax is not a buoyant source of revenue (i.e. does not increase at the same pace as like the sales tax or income tax), many experts feel that urban local bodies should be financed through user charges to the extent possible.

Collection of user charges for full cost recovery of services is a mandatory key ULB level reform under JNNURM. As per the MoA signed between the GoI and GoO, it is mandatory for all ULBs to collect user charges on services provided by them. The ULBs in Odisha have to realize the goal of full cost recovery of O & M cost on services by the year 2011-12. Some ULBs in India have successfully enhanced their resource base through innovation and reforms on collection of user charges.

2. STATUTORY PROVISIONS:

According to the Municipal Act 1950 [Chapter, XIII (131-A)], the "State Government has power to abolish, suspend, reduce or increase the rate of any tax levied by the Municipalities". According to the same Act [Chapter, XIII (131)], the Municipal body can levy /impose taxes on following:

- a) Latrine tax on the annual value of holdings
- b) Water Tax on the annual value of holdings
- c) Drainage tax on the annual value of holdings
- d) Poll tax subject to maximum and minimum rates as may be prescribed on animals, carts, and carriages other than motor vehicles carrying goods or passengers and entering the municipality where a festival or fair is held and notified by the municipality for the purpose.
- e) Any other tax which the municipality is empowered to impose under any law for the time being in force.
- f) Any other fee for services rendered by the municipality under the act for the health, safety, and convenience of residents.

According to the Municipal Corporation Act [(Chapter XIII (192- 196)], the Corporation has the power to levy taxes on the following:

- a) Tax on deficit in parking spaces in any non-residential building
- b) Water Tax
- c) Tax on advertisements other than advertisements published in newspapers
- d) Surcharge on entertainment tax
- e) Surcharge in electricity consumption within the corporation area
- f) Tax on congregations
- g) Toll charges on ferries, heavy vehicles
- h) According to the Municipal Corporation act (193) the Corporation shall levy user charges for.
- i) Provision of water supply, drainage and sewerage
- j) Solid waste management
- k) Parking of different types of vehicles in different periods
- l) Stacking of materials of rubbish on public streets for construction, alternation, repair or demolition work of any type.
- m) Sites used for advertisement on premises used for private markets, slaughter-houses, hospitals, nursing homes, clinics, factories, warehouses, godowns, good transport depots, eating houses, lodging houses, hotels, theatres, cinema-houses and places of public amusement and for other non-residential uses.
- n) The Corporation may levy such development charge as may be determined by regulations from time to time on any residential building with a being of more than fourteen meters or ant non-residential areas.

Besides, the 74th amendment act 1992 has made it mandatory for the constitution of State Finance Commission to review the finances of the municipalities including user charges for implementing municipal reforms.

The 13th Finance Commission has made declaration of minimum service standards by the Municipal bodies mandatory. The Commission has opined (Chapter 10, Para 10.161, page 179-180) that lack of resources often results in local bodies diluting the quantity of services provided by them. Therefore, state government must gradually put in place standards for delivery of all essential services provided by local bodies. To begin with, state government must notify or cause all the municipal corporations and municipalities to notify by the end of a fiscal year (31st march) the service standards for four services sectors like water supply, sewerage, storm water drainage and solid waste management proposed to be achieved by the end of the succeeding fiscal year. This could be in the form of a declaration of minimum level of service

for the indicators mentioned against each of these four sectors mentioned in the four sectors in handbook of Service level benchmark published by the Ministry of Urban Development.

The Commission has recommended that state government will notify before 31st March, 2011 that by 31st March, 2012, all municipalities and the Municipal Corporations in the state will provide a specified minimum level of service for each of the indicators for the four sectors i.e. water supply, sewerage, storm water drainage and solid waste management. These levels may be different for different local bodies.

3. LEVYING/REVISING USER CHARGES:

While levying user charges for the purpose of full cost recovery of a service, which includes operational as well as capital cost; some considerations are very important. As per the Mission norm, levying and revising user charges need to be accomplished with utmost care so as not to pass on the cost of present inefficiencies in the services to the service users. Additionally, there is a need to protect the interests of the urban poor and other vulnerable groups through lifeline tariff mechanisms and cross subsidies drawn from sources other than user charges from a particular service; for instance, commercial advertisements.

In case of the revision of user charges, increase of the fee must not be the first option. Upward revision of the user charges is a must if the same is underrated in comparison to the cost as well as quality of a particular service rendered by the ULB. In most of the cases, user charges were fixed by the ULBs long ago, which have not been revised since and do not match with the current market prices. In all such cases, the ULBs have to forthwith revise the user charges within the month of May, 2010. However, in all other cases, there are ways to achieve the objective of full cost recovery, other than mere increase in the user charges. It can be achieved by the following means:—

- Increase in the coverage of service and the user-base
- Reduction in losses (commercial and technical losses)
- Improvement in method of measurement of a service
- Improvement in billing and collection efficiency

While levying/revising user charges, the following key objectives must be adequately balanced:—

- Cost Recovery - On aggregate, user charges recovered from the consumers must produce revenue equal to the financial cost of the service.
- Economic Efficiency - Fix user charges equal to their relevant marginal costs. For example, provision of additional services may involve higher cost, which must be reflected in the user fee rates.

- Equity - User charges must treat similar service users equally, but customers in different situations are not treated the same. Users pay for services, which are proportional to the costs of providing the same.
- Affordability - While the basic objective of user charges is to recover service costs, the charges levied, should be affordable to the users. The ULB must choose affordable service levels and ensure efficient service. They can cross- subsidize the costs to address the issue of affordability by vulnerable sections.

Besides, the additional considerations involved in fixing user charges are as follows:—

- Resource conservation – To discourage “excessive” and “wasteful” use of public goods and services.
- Acceptability – To make user charges successful, it must be accepted by the people and the people’s representatives.
- Simplicity – To make user charges structure simple and easy to comprehend for both service providers (ULBs) and service users (citizens).
- Feasibility – To make user charge feasible both for the service provider and the service users.
- Transparency – To be transparent regarding fixation, revision and implementation of user fees. The service users should be provided with full information on all aspects of the service.

4. JUSTIFICATION OF USER CHARGES REFORMS:

The followings provide justification for levy or revision of user charges:—

- Rational user charges will recover cost and financially strengthen the ULBs to provide quality services on sustainable basis.
- It will help in generating surplus for expanding or upgrading a service and provide service from demand perspective.
- It will encourage people to realize the need for conservation of precious resources by reducing wastage and optimizing usage.
- It can be used as a redistributive mechanism; as differential tariffs can provide services to the urban poor and other vulnerable groups at cheaper rates.
- Full cost recovery will discourage the ULBs to divert or consume resources meant for other services or sectors.

5. BENEFITS OF USER CHARGES REFORMS:

Benefits of user charge reforms will accrue to the citizens as service users, ULBs and State/Central Governments in the following manner:—

a. Citizens as Service Users —

- Rational tariffs coupled with efficiency measures will ensure optimum service delivery and thus citizens as service users will get value for their money.
- Appropriate allocation of the service cost to the poor and non-poor segments of urban society will be possible.
- Appropriate tariffs will empower service users to demand quality service thus ensuring accountability on the part of the ULBs.

b. ULBs as Service Providers—

- Full cost recovery will generate resources that in turn will help to sustain, upgrade and on time expansion of services to meet the ever-increasing demand.
- Full cost recovery will help in freeing up resources for social sector investments like education, health and nutrition.
- In the long run, users pay rational charges for a financially sustainable service.
- It will contribute to overall improvement in service delivery, accountability and urban governance.

c. State / Central Governments—

- Reduced financial dependence of ULBs on the state and central governments will help in freeing up financial resources for other priority sectors.
- It will help the governments to provide subsidies in a more transparent manner to ULBs that are still in need of continued additional financial support because of their location or environment disadvantages.

6. STEPS TO IMPLEMENT REFORMS:

Implementing user charge reforms involves not only recovering cost incurred on provision of service, but also achieving economic efficiency (efficient investment allocation and distribution systems), equity and affordability (minimum lifeline rates). The following steps must be followed while implementing user charges reforms:—

▪ **Step-1**

Assess the real cost of operations and maintenance for each service. The ULB must ring-fence all the related costs pertaining to a specific service with clear demarcation in capital and revenue accounts. This permits the identification of the real costs for O&M so that the unit cost which needs to be recovered from the users can be assessed for the respective service.

▪ **Step-2**

Set principles for cross subsidization to ensure affordability and cost recovery at the same time. Establish affordability levels of low-income vulnerable groups through occasional surveys.

- **Step-3**

Ensure volumetric pricing wherein the user is charged based on consumption (water supply). However, in the absence of measurement systems, a simple telescopic flat tariff system can be followed until the measurement systems are in place. In the case of services like waste management, the user charges are flat tariffs only.

- **Step-4**

Prepare a progressive and rational tariff plan for ensuring recovery of total O&M costs, with immediate effect.

- **Step-5**

Make strategy to reduce commercial losses by improving management efficiency by way of improving billing and collection systems.

- **Step-6**

Make strategy to reduce physical losses and make budgetary provision for the same.

- **Step-7**

Carefully plan increase in tariff caused by inflation after consultation with user groups and the people's representatives.

7. ADHERING TO SERVICE STANDARDS:

While charging user fee, the ULBs as service providers must stick to minimum service standards. Service standard will be a vital consideration for performance rating of a ULB by the independent evaluator.

7.1 Sample of benchmarking MSW management: Collection frequency:

Types of locality	Class I cities/ towns	Class II cities/ towns	Class III Towns
Residential areas	Once a day	Once a day	Once a day
Market areas	Twice a day	Once or twice a day	Once a day
Industrial areas	Once a day	Once a day	Once a day
Commercial areas	Twice a day	Once or twice a day	Once a day

8. SERVICE WISE INDICATIVE USER CHARGES FOR ULBs IN ODISHA:

The following tables contain broad guidelines for collection of user charges. Each ULB will decide on exact amount after working out detailed costing of each service as well as category of target service users. The detailed operational mechanism of user charges collection can be decided as per ULB's requirement *vis-à-vis* feasibility. For mode of operation and other details, the ULBs may refer to the service-wise best practices annexed with this manual. The following

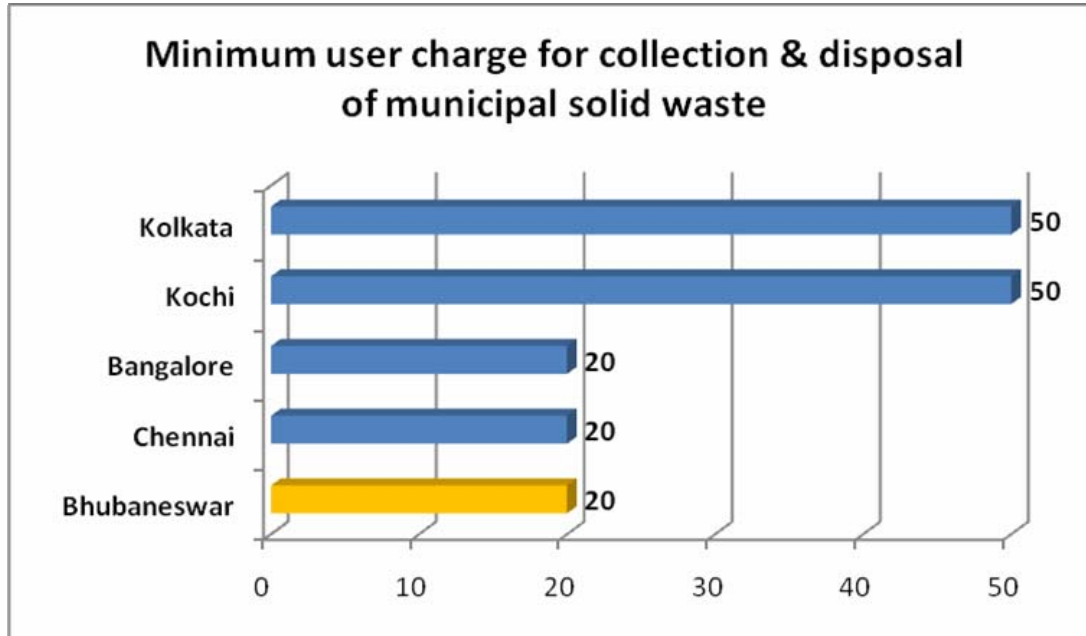
tables and graphs indicate service-wise per unit user charge proposed in different categories of cities/towns, which are worked out on the basis of existing user charges in other cities/towns in the country and some cities/towns in the state. However, user charges on water supply are not included in the present advisory since PHEO is executing the same.

8.1 CATEGORY-I CITIES/ TOWNS

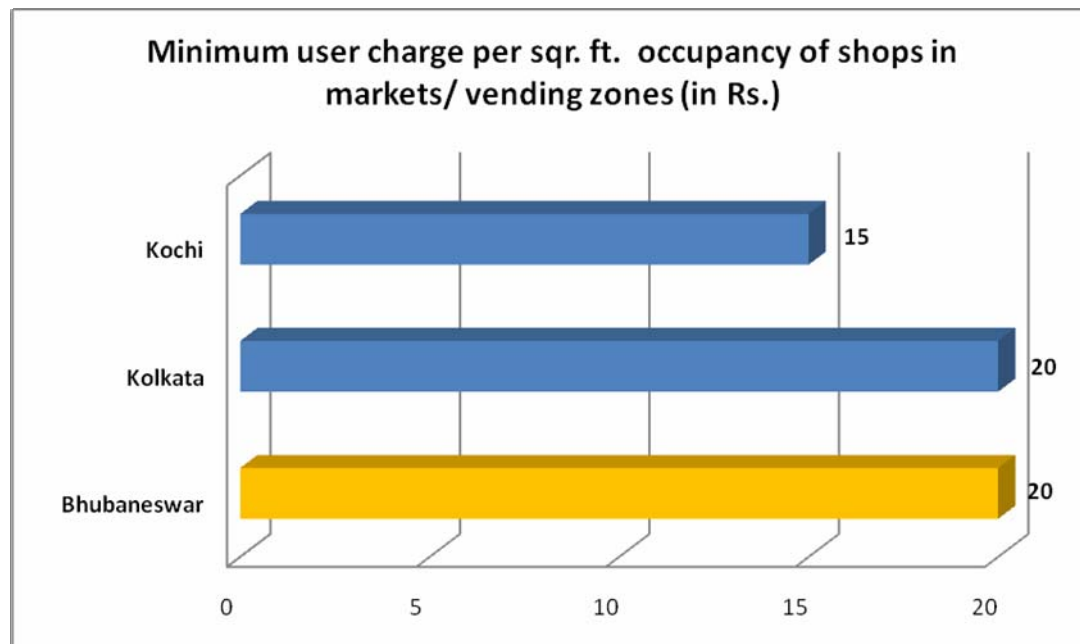
Category - I Cities / Towns (MCs & Municipalities)	Name of Service	Type of use/ Beneficiary	Modus Operandi	Unit	Recommended Per Unit User Charge
Bhubaneswar (MC)/ Cuttack(MC)/ Berhampur(MC)/ Puri(M)/ Rourkela(M)/ Balasore(M)/ Sambalpur(M)	Garbage/ Municipal Waste Collection	Commercial/In stitutional	PPP	Per Tractor Load	Rs 200/- to 300/-
			PPP	Per Bucket Load	Rs. 5/-
		Domestic	PPP	Per Household per Month	Rs 20/- to 40/-
	Parks & Recreation Facilities	Adult	PPP	Per 1 person	Rs. 10 /-
			PPP	Per 1 person	Rs. 8/-
			PPP	Per 1 child	Rs. 5/-
			PPP	Per 1 child	free
	Markets & Shopping Malls	Shop Owner	PPP	Per sqr. feet Occupancy PM	Rs. 10/- to Rs.50/-
	Public Toilets	Person using Bath Room	PPP	Per Bath per person	Rs. 5/-
			PPP	Per Toilet per person	Rs. 2/-
			PPP	Per Urination per person	free
	Four Wheelers Parking	Owner of 4 Wheeler	PPP	Per Vehicle	Rs. 20/-
	Two Wheelers Parking	Owner of 2 Wheeler	PPP	Per 2 Wheeler	Rs. 5/-
	By-cycle Parking	Owner of By-cycle	PPP	Per By- Cycle	free
Kalyan Mandaps (Non-AC)	Person Requisitioning for Reservation	PPP	Per Day/ Night	Rs. 15,000/-	

** Indicative only; the ULB concerned has to work out the user charges on case to case basis*

8.1.1 Minimum User Charges Proposed for Disposal of MSW in Category-I Cities in Odisha



8.1.2 Minimum User Charges Proposed for Per Sqr. Ft. Occupancy of ULB owned Shops in Category-I cities in Odisha



8.2 CATEGORY-II TOWNS

Category - II Towns (Municipalities)	Name of Service	Type of use/ Beneficiary	Modus Operandi	Unit	Recommended per unit User Charge
Anandpur (M) Angul (M) Baragarh (M) Barbil(M) Baripada (M) Belpahar (M) Bhadrak (M) Bhawani Patna (M) Biramitrapur (M) Bolangir (M) Brajaraja Nagar(M) Choudwar (M) Deogarh (M) Dhenkanal (M) Jagatsinghpur (M) Jajpur (M) Jatni (M) Jaypore (M) Jharsuguda (M) Joda (M) Kendrapara (M) Keonjhar Garh (M) Khurda (M) Konark (M) Nawarangpur (M) Paradeep (M) Paralakhemundi (M) Phulbani (M) Rajgangpur (M) Rayagada (M) Subarnapur (M) Sundargarh (M) Talcher (M) Vyasaganagar (M)	Garbage/ Municipal Waste Collection	Commercial/ Institutional	PPP	Per Tractor Load	Rs 150/- to 250/-
			PPP	Per Bucket Load	Rs. 4/-
		Domestic	PPP	Per Household per Month	Rs 10/- to Rs.30/-
	Parks & Recreation Facilities	Adult	PPP	Per 1 person	Rs. 8/-
		13-17	PPP	Per 1 person	Rs. 6/-
		6-12 years	PPP	Per 1 child	Rs. 4/-
		0-5 years	PPP	Per 1 child	free
	Markets and Shopping Malls	Shop Owner	PPP	Per sqr. feet Occupancy PM	Rs.10/- to Rs. 40/-
		Vending Zones	Shop Owner	PPP	Per sqr. feet Occupancy PM
	Public Toilets	Person using Bath Room	PPP	Per Bath per person	Rs.4/-
		Person using Toilet	PPP	Per Toilet per person	Rs. 1.50
		Person using Urinal	PPP	Per Urination per person	free
	Four Wheelers Parking	Owner of 4 Wheeler	PPP	Per Vehicle	Rs. 15/-
	Two Wheelers Parking	Owner of 2 Wheeler	PPP	Per 2 Wheeler	Rs. 5/-
	By-cycle Parking	Owner of By-cycle	Per By-Cycle	Per By-Cycle	free
	Kalyan Mandaps (Non-AC)	Person Requisitioning for Reservation	PPP	Per Day/ Night	Rs.10,000/-

**Indicative only; the ULB concerned has to work out the user charges on case to case basis*

8.3 CATEGORY-III TOWNS

Category – III Towns (NACs)	Name of Service	Type of use/ Beneficiary	Modus Operandi	Unit	Recommended per unit User Charge
Aska (N) Athagarh (N) Athamallik (N) Balimela (N) Balugaon (N) Banapur (N) Banki (N) Barapali (N) Basudevapur (N) Belaguntha (N) Bhanja Nagar (N) Bhuban (N) Binika (N) Buguda (N) Burla (N) Chhatrapur (N) Chikiti (N) Boudh Garah (N) Digapahandi (N) G. Udayagiri (N) Ganjam (N) Gopalpur (N) Gudari (N) Gunupur (N) Hinjilikatu (N) Hirakud (N) Jaleswar (N) Junagarh (N) Kabisurya Nagar (N) Kamakhyanagar (N) Kantabanjhi (N) Karanjia (N) Kashi Nagar (N) Kesinga (N) Khallikote (N) Khandapara (N) Khariar (N) Khariar Road (N) Kodala (N) Koraput (N) Kotpad (N) Kuchinda (N) Malkangiri (N) Nayagarh (N) Nilagiri (N) Nimapara (N) Padamapur (N) Patanagarh (N) Pattamundai (N) Pipili (N) Polsara (N) Purusottampur (N) Rairangpur (N) Redhakhol (N) Sorada (N) Soro (N) Rambha (N) Sunabeda (N) Tarava (N) Titlagarh (N) Udala (N) Umarkote (N)	Garbage/ Municipal Waste Collection	Commercial/ Institutional	PPP	Per Tractor Load	Rs. 100/- to 200/-
			PPP	Per Bucket Load	Rs. 3/-
		Domestic	PPP	Per Household PM	Rs. 10/ to Rs.20/-
	Parks & Recreation Facilities	Adult	PPP	Per 1 person	Rs. 6/-
			PPP	Per 1 person	Rs.4/-
			PPP	Per 1 child	Rs. 3/-
			PPP	Per 1 child	free
	Markets and Shopping Malls	Shop Owner	PPP	Per sqr. feet occupancy PM	Rs. 8/- to Rs. 30/-
			PPP	Per sqr. feet occupancy PM	Rs. 3/- to Rs. 5/-
	Public Toilets	Person using Bath Room	PPP	Per Bath per person	Rs. 5/-
		Person using Toilet	PPP	Per Toilet per person	Rs. 2/-
		Person using Urinal	PPP	Per Urination per person	free
	Four Wheelers Parking	Owner of 4 Wheeler	PPP	Per Vehicle	Rs. 10/-
	Two Wheelers Parking	Owner of 2 Wheeler	PPP	Per 2 Wheeler	Rs. 4/-
	By-cycle Parking	Owner of By-cycle	Per By- Cycle	Per By- Cycle	Rs. 2/-
	Kalyan Mandaps (Non-AC)	Person Requisitioning for Reservation	PPP	Per Day/ Night	Rs. 5,000/-

**Indicative only; the ULB concerned has to work out the user charges on case to case basis*

9 ELECTRONICALLY GENERATED RECEIPTS

It is mandatory for the ULBs have to ensure that the above mentioned user charges are collected through electronically generated receipts by use of electronic vending machines to instantly record the collected amount.

10 OTHER POSSIBLE SOURCES OF REVENUE

The ULB must explore other sources of generating additional revenue through collection of fines for illegal activities such as piling up sands, building materials etc. on roads and other public properties, digging roads etc.

11 TIMELINE TO IMPLEMENT REFORMS

It is mandatory for all ULBs to commit to user charges reform with immediate effect and ensure full recovery of O&M costs, including inflation induced cost. The State Government has made commitments to the GoI for implementing user charges reforms for full cost recovery of public services. Although the ULB concerned will work out in detail to levy and rationalize user charges to meet cost recovery and service standards goals, full cost recovery is mandatory for all the ULBs in the state from the year 2009-10; on which various grants are going to be linked. All ULBs must fully implement user charges reforms for 100 per cent cost recovery by the year 2011-12.

12 OUTCOMES OF USER CHARGES REFORM

Key outcomes of the user charge reform are:

- Financial self-sustainability of services facilitating availability of resources for other social development sectors.
- Increased recovery of cost of providing services resulting in improved financial resources of the ULB.
- Availability of adequate capital for meeting demand growth and standardized services
- Ensuring transparent subsidy structure in user charges for urban poor using the services
- Equity and fairness of user charge structure not only for the urban poor, but also for all types of consumers of the service
- Ensuring resource conservation through increased block tariff structures
- Transparency and accountability in service costs to be recovered through user charges and disclosure of cost information to all stakeholders.
- Efficient management of services with committed plans for reducing losses and improved customer services.

**SUGGESTED METHOD FOR PERFORMANCE RATING OF ULBs
(User Charges Collection: 70 % overall weight (age))**

Component	Weight (age) %	Performance %			Approx. O & M Cost	Approx. U. Ch. Collection	Actual Performance %
		100%	90%	70%			
Solid Waste collection and disposal							
User Charges Collection	28	28.00	25.20	19.60	1000000	800000	80
Pay n Use Amenities							
User Charges Collection for using Toilets	7	7.00	6.30	4.90	500000	300000	60
User Charges Collection for using Community Centres	10	7.00	6.30	4.90	500000	1000000	200
User Charges Collection to use parking facility	10	10.00	9.00	7.00	500000	500000	100
User Charges Collection for using amusement parks	10	10.00	9.00	7.00	500000	400000	80

SUGGESTED METHOD FOR PERFORMANCE RATING OF ULBs
(Service Standards: 30 % overall weight (age))

Service Indicator	Benchmark	Weight (age)
Collection, Treatment & Disposal MSW		
Coverage	Full city coverage	4%
	Less than full city coverage	2%
	Less than half city coverage	Nil
Frequency of door to door collection	Once in a day	4%
	Once in two days	2%
	Once in more than two days	Nil
Disposal and Treatment	Treatment and disposal at designated site	4%
	Only disposal at designated site	2%
	No disposal/no treatment/disposal at open site	Nil
Pay n Use Toilets		
Cleaning of public toilets	Twice daily	3%
	Once daily	1.50%
	Once in more than a day	Nil
Pay n Use Community Centres		
Availability of water	24X7	1%
	Less than 24X7	Nil
Maintenance	Satisfactory	1%
	Not satisfactory	Nil
Cleaning	Satisfactory	1%
	Not satisfactory	Nil
Pay n Use Vehicle Parking		
Time consumed for parking	Time consumed to park and take out vehicle – less than 5 minutes	1%
	Time consumed to park and take out vehicle – more than 5 minutes	Nil
Parking without congestion in regular traffic	Parking without congestion in the regular traffic	1%
	Congestion in the regular traffic cause by parking	Nil
No. of complaints	Few	1%
	Many	Nil
Pay n Use Amusement Parks		
Green & Clean Parks	Green and Clean	1%
	Dry and Unclean	Nil
Secured Parks	Security – available & effective	1%
	Security – either not available or available but not effective	Nil
Amenities	Drinking water, separate toilets & refreshment amenities available	1%
	Either some of the above mentioned amenities available or any of these not available	Nil

**SERVICE WISE COMPARATIVE FIGURES ON
USER CHARGES COLLECTION IN SOME CITIES**

CITIES/ TOWNS	Garbage/ municipal waste collection	Markets	Vehicle Parking	Community Halls(AC)
Bangalore	Rs 20/- Per HH		Rs 5 /- Two Wheeler Per hr	
			Rs 10 /- Four Wheeler/ Per Hr	
Ahmadabad	Rs 5- 10/- Per HH			
Pune	Rs 10/- Per HH			
Chennai	Rs 20/- Per HH			
Delhi	Rs 20/- Per HH		Rs 5/- Two wheeler per hour	Rs 20,000/- 24 hour basis
			Rs 10 /- four wheeler per hour	
Kolkata	Rs 50/- Per HH	Rs 20/- per sq ft	Rs 5 /- Two Wheeler Per hr	Rs 25,000/- 24 hour basis
			Rs 10/- Four wheeler Per hr	
Kochi	Rs 50 Per HH	Rs 15/- Per sq ft		
Agra	Rs 10 Per HH			
Nagpur	Rs 5.50- Rs 10 Per HH			
Coimbatore	Rs 10 Per HH			
Akola (Maharashtra)	Rs 10-15 Per HH			
Jetpur Navagadh (Gujarat)	Rs 5 Per HH			

LOCALITIES MANAGE THEIR OWN WASTE BETTER (GREATER MUMBAI)

THE INITIATIVE

Municipal Corporation of Greater Mumbai has adopted ALM scheme wherein citizens and the Municipal Corporation employees work hand-in-hand for the improvement of solid waste management services. These ALM groups are actively involved in segregation of waste into dry and wet waste and vermiculture of biodegradable waste. It also handles various other civic problems and developmental works in the given locality. This scheme was started in July 1997 with only one locality participating in it, and by December 2000 number of ALM Societies registered has grown to 666. ALM concept has also been extended to slums and commercial areas. The concept has been recognized as an effective model for citizen's participation in waste management.

SITUATION BEFORE THE INITIATIVE

- People were totally dependant upon the Municipal Corporation for cleanliness and did not take interest in keeping their locality clean. There was little interaction between residents and the Corporation employees.
- The waste from the community bins was not always collected on daily basis.
- Lack of timely street sweeping and littering by people resulted in dirty streets. At some places the surface water drains choked due to accumulation of solid waste in it.
- Accumulation of waste on streets and around the community bins was a threat to health and hygiene.
- Rag pickers used to pick waste from collection points and landfill areas in a very unhygienic manner.

DESCRIPTION OF THE INITIATIVE

- The main objective of the ALM scheme was to develop a Citizen-Corporation partnership for environment-friendly waste management. It focused on waste minimization through source segregation, recycling and reuse to reduce waste to the minimum.
- The process of forming ALM got initiated with a three month long 'zero garbage' drive in 1997. Various departments of the Corporation were involved in this drive. Awareness generation programs were conducted in these localities with assistance of local NGOs / CBOs. Schools were also covered.
- Meetings and focused group discussions were held between the residents and the Corporation officials. Problems were identified at the local level through these discussions.
- Housing societies / communities were asked to register themselves as a prerequisite to ALM scheme.
- The residents were encouraged to carry out segregation of waste into dry and wet waste.
- The rag pickers were mobilized for carrying away recyclable waste. The segregated biodegradable waste was either composted or vermi-cultured or lifted by the Corporation to take it to the nearby landfill sites.
- Each housing society forming an ALM raised Re.1/- per day per family for segregation of waste at the community level, sweeping of streets and local composting of biodegradable waste through vermiculture. The accounts for the expenditure on ALM were maintained by the housing societies themselves.
- The day-to-day civic problems of ALM societies like drinking water supply; sewerage system, storm water drains and cleanliness are attended on weekly basis. Officials of the Corporation have regular meetings with the ALM societies to solve their problems.
- This interaction has helped in developing peoples' faith in city's governance.

PROBLEMS FACED

- Initially the people were not ready to trust their own community members at the local level. Also, the performance of the Corporation was questioned based upon the past experiences.
- People were habituated in littering the streets and roads. It was initially difficult to stop them from this habit.
- Many people were not ready to contribute towards the maintenance fund.

BENEFITS

- Involvement and active participation of citizens in initiative improved level of cleanliness in locality considerably.
- Throwing of garbage on roads has come down considerably. Segregation of waste at household level has increased. Dustbins were removed from the main roads and this provides a cleaner look to streets.
- The system has provided a platform for the Corporation and the residents to work together and in cooperation with each other rather than of confrontation, as earlier.
- Little Alms that are functioning for more than three years have increased their scope to other activities such as tree plantation, prevention of encroachment on pavement, beautification of streets, etc.
- The ALM movement that started with objective of cleanliness i.e., Zero Garbage, is gradually spreading to other areas of peoples' grievances regarding other civic services like maintenance of roads, improvement in water supply, check on unauthorized construction and monitoring unauthorized hawking.

LESSONS LEARNED

- Citizens respond positively to the policies of the local bodies and are willing to contribute for the betterment of their locality.
- It is simpler to solicit people's involvement at the community or local level, rather than for a large area.
- A comprehensive approach of solving a locality's problems, rather than only demanding segregation, etc. from the community seems to be the reason behind the success of the initiative.

ISSUES

- Over last 8 years, very few ALM societies have come up which is just a small fraction compared to size of Mumbai city. ALM should spread much faster, for which the Corporation has to evolve a suitable system treating each ward or group of wards as an independent entity and not look at entire mega city.
- The fast paced life does not afford spare time for volunteering for the awareness campaign. The volunteers may be appointed giving them some honorarium paid out of the donations from corporate, business and commercial establishments.
- The Corporation should make it mandatory for residents and commercial establishments to give segregated waste and adopt ALM systems. Without compulsion, the city is too big to leave things entirely to awareness and willingness to comply with the rule. A system of penalty and its strict enforcement through nuisance detection squads should be established.

SUSTAINABILITY

The relationship that has been developed between the people and the Municipal Corporation assures that the results achieved by the initiative would have a long lasting effect. The ALM societies are generating their own resources to undertake SWM. This indicates that the concept of ALM is moving towards self-sustainability at society level.

SOLID WASTE MANAGEMENT IN NAGPUR

THE INITIATIVE

A unique scheme called 'Swachchata Doot Aplya Dari' came into existence since 26th January 2004 in the Nagpur Municipal Corporation and has helped it provide door-to-door waste collection to the entire city. The work is conducted through NGOs on contract basis to cover the entire city. As the waste is collected from the door, garbage reaching the road is minimized which gives the city a clean look. Around 1500 persons are deployed for the task. Every 'Swachchata Doot' is assigned a target of covering 300 households per day (in 8 hours). Out of the total waste collected by this method, almost 50 per cent waste is segregated. Since the dry waste becomes the property of the NGO, there is a very strong inbuilt incentive for the 'Swachchata Doot' to encourage each generator to segregate its waste before the same is handed over. The Corporation pays Rs.5.50 per household per month to the NGOs. Besides this the NGOs are free to collect voluntary payment made by the citizens. The Municipal Corporation could save an establishment cost of Rs.5 crore per year by engaging NGOs for the task.

DESCRIPTION OF THE INITIATIVE

Nagpur Municipal Corporation decided to collect waste from house-to-house in order to minimize the quantity of waste coming on roads and streets. However the Corporation did not have enough municipal sweepers for this job. Initially, Nagpur Municipal Corporation planned to carry out house-to-house waste collection through the substitute sweepers of the department at a fixed monthly honorarium of Rs.1200 per month. The labour unions strongly opposed the scheme and demanded Rs.3300 per month per substitute. This amounted to Rs 8 crore per year for 2000 sweepers. In order to reduce the cost and due to financial restraint, the Corporation decided to get the work done through NGOs. From November 2003, the Corporation covered 40 per cent of the city area under this scheme of door-to door waste collection by engaging the NGO, while employing its own staff covered the rest. Looking at its success, the Corporation decided to cover the entire city through this scheme, and to cover 100 per cent door-to-door waste collection, covering both housing and shopping areas. The scheme called 'Swachchata Doot Aplya Dari' came into existence since 26th January 2004.

The scheme has improved the cleanliness in the city. As the waste is collected from the door, garbage reaching the road is minimized which gives the city a clean look.

STRATEGIES ADOPTED

- Nagpur Municipal Corporation issued tender notice in the local newspaper to call bids from NGOs to collect solid waste from households covering all 10 zones of the city. Separate bids were called for each zone. The details of number of households and labour requirement per zone were given in the tender document. Two NGOs applied for the work and after the bids were evaluated the work of door-to-door waste collection covering all the 10 zones of the city was awarded.
- The labours appointed are called 'Swachchata Doot' and are given identity cards by the Corporation. They move from house to house and from shop to shop to collect waste from 6am to 3pm every day including Sundays, public holidays, etc. The 'Swachchata Doot' has to collect the segregated waste. They sell the dry waste and get an extra income.
- Around 1500 persons are deployed for the task. A benchmark for monitoring the sweepers' performance is laid. Every 'Swachchata Doot' is assigned a target of covering 300 households per day (in 8 hours). The record of the attendance and work performed by the 'Swachchata Doots' has to be maintained by the NGOs.

- The Corporation pays Rs.5.50 per household per month to the NGOs. Besides this the NGOs are free to collect voluntary payment made by the citizens. The total cost to the corporation is only Rs 3 crores annually.
- The Corporation has deployed its own vehicles for the purpose - 550 cycle-rickshaws and 990 handcarts, which are operated and maintained by the NGOs. They also have to take care of the safety and the parking of the vehicles. The cost of the equipment is approximately Rs.1.8 crore.
- The equipments are designed in such a way that it does not require direct handling of the waste. The waste from rickshaws and handcarts is placed in the containers by elevation and tilting mechanism from where it is taken to the landfill site.
- The 'Swachchata Doots' are deployed only for door-to-door waste collection. The Municipal workers do the road sweeping and drain cleaning.

AWARENESS CREATION

NMC directed the NGOs to issue public notices and pamphlets to guide all the generators of solid waste in the city to collect biodegradable and recyclable waste separately in two containers. The NGOs are given the task of conducting awareness campaigns as part of their job. This is being done by their volunteers' visit to individual households and conduct community level meetings by involving Mahila Mandals.

RESPONSIBILITIES OF THE NGOS

- The NGOs have to give uniforms to the sweepers. If a sweeper does not wear the uniform on duty, a fine of Rs.25 per day per sweeper and if s/he does not carry the identity card, a fine of Rs.10 per day per sweeper is charged to the NGO.
- Details of area wise allotment of sweepers by the NGOs have to be submitted regularly to the MC so that their work can be monitored.
- Segregation of waste into dry and wet is the responsibility of the NGOs.
- All complaints from the public shall have to be taken care of by the NGOs.
- NGOs have to give the Municipal Corporation details of voluntary payment collected from the citizens.
- Penalty levied by the Municipal Corporation on the NGO for not covering the complete area under door to- door waste collection is Rs.5 per household.
- If any waste other than wet waste is dumped in the Municipal Corporation containers, a penalty of Rs.100 per container is charged to the NGO.

BENEFITS

- This is one of the most successful efforts for 100% house-to-house collection in a large metropolitan city, and that too at an affordable cost, and in a manner that is fully sustainable. Approximately 4.50 lakh households and 5000 shops and commercial establishments are being covered daily. Out of 600 MT per day of waste transported, 560 MT per day is collected through door-to-door waste collection. The MC has been able to remove almost 90 per cent of the bins (800 bins removed).
- The Corporation went about the effort in a very systematic manner. As it was difficult to cover all the areas in the beginning, the Municipal Corporation started stage-wise door to-door waste collection covering 40 per cent initially and then extending it to 100 per cent. This provided the Corporation with an opportunity to test out the methodology before extending its scope.
- Involvement of NGOs for collection, segregation and transportation of waste has reduced the cost for the Municipal Corporation and also reduced its workload. The Corporation is able to save Rs.5 crore by system is cost effective and easy to maintain cleanliness in the city.
- The Corporation now plays the role of a facilitator and monitor for the work of day-to-day collection instead of becoming the service provider. Thus it can play the role of quality control much more effectively.

- Out of the total waste collected by this method, almost 50 per cent waste is segregated. Since the dry waste becomes the property of the NGO, there is a very strong inbuilt incentive for the 'Swachchata Doot' to encourage each generator to segregate its waste before the same is handed over.
- The people realize the importance of cleanliness and are also paying voluntarily for the service charge. This ensures their involvement in ensuring the accountability of the agency in maintaining cleanliness.
- A large employment has been generated in the local area.

ISSUES

- The present contract is for the NGO to collect the garbage and empty the same into the community bins. A separate contract is in place to transport the waste to the landfill site. It could be even more advantageous in case the NGOs were encouraged to go in for decentralized waste processing to reduce waste to be transported to the landfill site.
- The problem really arises when an agency is only responsible for door-to-door collection transportation. In this case it can dump whatever it wants to in the community bins and no incentives can be provided for reduction / segregation of waste.
- NGO appointed 'Swachchata Doots' carry on door-to-door collection but road sweeping and drain cleaning still remains with the municipal workers. This may create dispute over that should clean roads and drains where 'Swachchata Doots' or even local people to avoid service charges of Rs 5.50 dump unwanted waste.
- Municipal Corporation has bought its own vehicles for the task. Allowing the NGOs to deploy their vehicles could have reduced this cost to the Corporation.

SUSTAINABILITY

This initiative has been beneficial to the corporation in terms of reducing its workload and also financially. The same services if provided by the Municipal Corporation would have cost them about Rs 5 crore more annually. The success of such initiatives also would bring in more NGOs in competition with existing NGOs, which would mean better efficiency and better results.

TRANSFERABILITY

The practice is definitely transferable to other cities, which are still trying pilot projects for door-to-door collection.

SPIC N' SPAN

NASHIK'S WASTE COLLECTED SANS SOURCE SEGREGATION

THE INITIATIVE

Nashik Municipal Corporation has attempted to turn the city into a bin-less city. The initiative started in August 2003 and by now Municipal Corporation has successfully removed almost 90 per cent of the community bins from the city. This has been possible as a result of the waste being collected from the residential areas at a pre-informed time which is then directly taken to the compost plant.

DESCRIPTION OF THE INITIATIVE

Nashik Municipal Corporation has contracted out the work of collection and transportation of the waste of the entire city to a single private agency. The contractor provides the vehicles and the labour on them. The primary responsibility of the contractor is to carry out door-to-door collection of waste from each household in the city by deploying his own vehicles. The vehicles operate from 9am in the morning till 3pm in the afternoon on the routes fixed by the Municipal Corporation. The contractor also lifts the uncollected garbage on its route. The waste collected by the contractor should not contain any stones/soil and garden waste. The vehicles have to be such that the waste does not fall on the road and the contractor is supposed to transport the collected waste in covered vehicles. In case of any breakdown, the contractor is to replace the vehicles within one hour failing which a fine equivalent to the daily payment due to the contractor is levied. The vehicles empty the waste at the processing facility in presence of the municipal staff and the weight is jointly recorded.

The contractor also needs to organize the labourers and ensure that they are provided with the necessary safety equipment like gumboots, gloves, etc. The contractor is free to employ as many workers as it deems fit and is to directly make payments to them. The contractor has indemnified the Municipal Corporation against any claim by the workers.

The Municipal Corporation pays a fixed charge of Rs.475 per tonne for collection and transportation to the contractor. Payment is done after monitoring the work of the contractor. In case of default certain penalty is levied from the payment. The contract is for a period of one year. This is renewed depending upon the performance of the contractor.

BENEFITS

- Elimination of bins from the city has resulted in giving the city a clean look.
- The people are benefited as they are getting the service at their doorstep. Their tendency of throwing waste on streets has been reduced considerably.
- The employment is generated at local level by involving private sector. Also the Corporation does not have to bear the burden of the labour and transportation.
- The short-term of the contract helps to maintain the quality of work by the contractor in order to get his contract renewed.
- The contract is output based (tonne of waste reaching the processing site) and is thus very easy to monitor.

ISSUES

- There is no provision for segregation of the waste at the source. The mixed waste is directly taken to the compost plant where the waste is segregated through mechanized way. Segregation of waste at source could result in reduction of cost of transportation and better utilization of dry waste.

- The present payment system does not ensure cent percent daily collection of waste. Only on the receipt can be imposed on the contractor. This could be avoided if the payment was on the basis of households and a part of the payment was to be made by the households (as in Nanded and Nagpur).
- Similarly, the responsibility of keeping certain roads / localities clean is not clear placed on the contractor.
- Since the payment is to be made on tonnage basis, there seems to be little incentive (in fact a negative) for the contractor to reduce the garbage through decentralized processing or sale of recyclables. Similarly a uniform rate of payment for all types of waste would not encourage segregation. In case differential rates are fixed for segregated waste (higher rates) and mixed waste (lower rates) the system could be improved.
- Penalties for not covering the waste during transportation or non-provision of safety equipment to the staff could lead to better control or fewer disputes.
- The residents should be encouraged to pay a minimal amount of user fee. This will ensure their interest in monitoring cleanliness in their locality and also reduce the financial burden of the Municipal Corporation.
- Nearly 2000 rag pickers, earlier earning their livelihood in the city from the separation of recyclables from household waste, lost their means of livelihood after the Corporation decided to engage the services of the contractor. The Corporations could consider giving priority in awarding contracts to groups / cooperatives of waste pickers or to contractor who agrees to employ these waste pickers. However how to identify them would be a problem.
- Since the waste is directly loaded on the trucks from the households, this requires a substantial number of labourers on these trucks. There have been reservations in some quarters about the hygiene of the workers engaged on the trucks.

SUSTAINABILITY

The sustainability of the practice will depend upon the contribution of the local Corporators and the citizens in the long run. Educating the residents about segregation at source shall go a long way in sustaining the practice.

TRANSFERABILITY

The practice is transferable to other cities of similar size, which are still trying pilot projects for door-to-door collection of waste.

AUTOMATED PARKING SYSTEM – BANGALORE

The Brigade Road considered as a shopper’s paradise in Bangalore, was heavily congested with high traffic volumes on the road causing frequent traffic jams. Therefore to remove parking on Brigade Road, the BMC in association with the Brigade Shops Establishments Association (BSEA) established Automated Parking as a sustainable measure to resolve the issue. Today this is being replicated in other shopping centers of the city.

PREVIOUS STATUS

The Brigade Road is considered to be a shopper’s paradise in Bangalore. Heavy traffic volumes on this road caused frequent traffic jams. It was therefore decided to remove parking on Brigade Road. But the shop owners on Brigade Road felt that such a move would adversely affect their business. On the other hand, it was difficult for the BMC to manage the manual parking system. All these problems led to a novel initiative, which is today been replicated in other shopping centers of the city. In the earlier system, the BMC auctioned the rights to collect parking fees to private individuals. This was manually handled; hence there was no record of the number of vehicles or the money collected. Further, there was no time limit on parking. The situation of traffic jams on Brigade Road and frequent complaints from customers called for an alternative approach. The BMC in association with the Brigade Shops Establishments Association (BSEA) established Automated Parking as a sustainable measure to resolve the issue.

IMPLEMENTATION STRATEGIES

Shopkeepers of Brigade Road formed the association – BSEA when faced with the threat of removal of parking on Brigade Road. The BSEA had undertaken surveillance to determine parking patterns in view of the location of offices, cinemas and restaurants and to assess the nature of parking users. The BMC entered into a Memorandum of Understanding (MoU) with BSEA for the pay-and-park scheme on Brigade Road; the duration of the partnership was for an initial period of two years, renewable further for a period of five years. A standard MoU with the Build- Operate-Transfer (BOT) partner was drawn up along with an amortization schedule for the period of the MoU. The BSEA came forward to import eight parking meters from “Schlumberger Sema” in France and the contract for installation and maintenance was given to “Smart Parking International Pvt. Ltd.” From Malaysia in October 2003. The machine functions on solar energy and the instructions are in English. Strategic locations for installing these meters were decided based on the kind of visitors.

HOW THE PARKING METER WORKS?

Park the car in the bay, insert money into the meter depending on the time limit of the shopper, obtain a parking ticket

Punch in the license number, data, starting time and ending time

Leave the ticket inside the car on the windscreen

If the parking time exceeds two hours or if the ticket is not placed in the car, traffic police will tow away the vehicle and a fine of Rs. 500 will be levied

The meters installed were re-configured to accept Indian coins and instructions in English. Initially guards were employed at each parking meter to assist customers. The parking system can be monitored from a control room. The charges levied in Brigade Road for four wheeler parking is as follows:

Rs. 5 for half an hour

Rs. 10 for an hour

Rs. 15 for one and a half hour

Rs. 20 for two hours (maximum limit)

RESOURCE MOBILIZATION

The overall project cost amounted to Rs. 38 lakhs. The required fund was raised by BSEA through innovative ways of conducting various entertainment shows. There is also a contribution from each member of the Association in the form of an enrolment fee of Rs. 1000 and a yearly membership fee of Rs. 1200.

RESULTS AND IMPACT

There are a total of nearly 85 parking bays, accommodating approximately 1623 cars in a day on rotation.

The revenue generated is three times that of the old system.

Fifty per cent of the revenue generated goes to BMC as its share (approx. Rs. 1.5 lakhs per month) and the balance is used by the BSEA for maintenance of the parking meters, paying the guards, pavement maintenance etc.

SUSTAINABILITY

The automated parking system is technically sustainable as the system is mechanized thus preventing corruption. It maintains data on the number of vehicles versus the amount collected and the duration of time for which the vehicle was parked. The initiative is financially sustainable, even though the capital investment is high. The daily collection, which is done based on the parking rates, has proven to be profitable. For its long term sustainability, regular maintenance of at least once in 3 months is required. The flexibility of the parking meter machine is that it is solar operated, thus saving electrical energy.

LESSONS LEARNT

Introduction of technological tools in governance enables ULBs to keep pace with changing times and in providing quick solutions to various civic problems.

A similar imitative can also be extended for two-wheeler parking.

A key learning that emerges is that public-private partnerships can be forged if there is a realization that there is much to be gained from such partnership.

While proposing parking system, there is a need for adequate survey for traffic inflow and outflow.

REPLICABILITY

The new parking system implemented at Brigade Road has been a role model for similar initiatives. This project is readily applicable and can be used in any city/town where unmanageable parking has been an issue. The flexibility of the project allows customizing the rates for parking (both for four and two wheelers) depending on the activities and the profile of customers who visit the street.

UNDER GROUND PARKING IN KOLKATA

Parking in central Kolkata, the heart of this mega city, has always been a hassle is the case with most inner city areas. In an attempt to address the situation, the Kolkata Municipal Corporation (KMC) decided to utilize the rights to underground space and undertake the parking project as a Public Private Partnership project on a Build-Own- Operate-Transfer (BOOT) basis.

SITUATION BEFORE THE INITIATIVE

Central Kolkata, particularly the New Market area near the Kolkata Municipal Corporation (KMC), is a very busy commercial zone with narrow streets and roads. The Lindsay Street, part of this locality is one of the most congested roads in terms of traffic. The problem was further aggravated by haphazard and unruly parking that led to serious traffic jams. To find a solution to these problems, the KMC decided in 2001 to construct the city's first underground parking system off Lindsay Street. The multi-level underground car parking system was inaugurated in April 2007.

IMPLEMENTATION STRATEGIES

The PPP parking project was conceptualized as a two-part Build-Own- Operate-Transfer (BOOT) project with two concession periods one for the parking system and the other for the commercial complex (both underground). The overland portion was converted into a pedestrian plaza. There are two levels of basement in the system, of which the upper basement (Level 1) has been utilized for commercial development while the lower basement (Level 2) is exclusively used as a car parking area. This was a double-concession BOOT project.

UG LEVEL 1: COMMERCIAL DEVELOPMENT

To make the project self-sustaining and as part of the BOOT arrangement, the KMC granted permission to Simplex to construct and lease out the commercial blocks on a long-term basis. Simplex pays the lease rent as well as basic rent.

UG LEVEL 2: PARKING LOT

The KMC and Simplex Projects entered into a BOOT agreement for 20 years for the parking system. The underground Level-1 was made available for the construction of a commercial complex etc. in keeping with the ambience of a walkway and pedestrian plaza overground, the features of which merged with the architectural features of the existing heritage structure. Mostly, glass was used on the structure above the ground level for total visibility of the adjoining New Market façade. The KMC has allowed Simplex to impose and collect the parking charges for all the vehicles parked within the system on mutually agreed terms and conditions. Simplex pays the KMC, five per cent of the gross annual revenue earned from parking for the concession period of 20 years. Simplex has been given the right to put up advertisements in the form of show-windows, kiosks and other such formats at no extra cost. To make people use this parking facility, and to decongest the Lindsay Street locality, the KMC has prohibited "on-street parking" in the zone of influence around the system and within a radius of 100 meters. At the expiry of the 20-year concession period, the parking system will be handed over to the KMC. The parking fee is Rs. 10 per hour (with a provision of discount for long-term parking) and is collected by Simplex.

RESULTS AND OUTCOME

250 parking slots in the underground parking system at Level-2.

Market complex at Level-1 with 200 shops on lease; the premium goes to the concessionaire as charged by him.

This is perhaps the first time in India that the two car lifts provide the added convenience to users for taking their cars to underground Level-2 and bringing them out. This type of lift saves space by avoiding a meandering underground road.

The KMC collects the basic rent from each of the shop owners at Rs. 25 quarterly per square meter as extra income with no investment.

The pedestrian plaza on the ground is a bonus for pedestrians.

SUSTAINABILITY

Financial sustainability of the partnership project has been ensured in terms of:

Parking fees, advertisement rights and premium on shops – gives returns on investment for the concessionaire because of the very nature of the BOOT contract.

Five per cent of the parking revenue that KMC gets from Simplex

Projects for 20 years generating an estimated annual revenue of Rs. 5 lakh for KMC.

The quarterly basic rent that the KMC gets from each of the shop owners is the return that the KMC gets for giving rights to the BOOT operator for use of its vacant land.

LESSONS LEARNT

A public-private partnership model on BOOT basis has many advantages. Over a long concession period, both the BOOT operator and the KMC are bound to earn revenues and even profits.

PPP models of partnership in infrastructure development form the most sustainable approach for a city government that most often has a resource crunch both, in terms of finance and in terms of engineering staff.

Public service provided by a Local Government can also become an alternative source of additional revenue.

Underground development can be an alternative where ground level space is scarce, especially in mega cities.

REPLICABILITY

All mega cities and their old, inner city areas have issues of traffic and parking. Moreover, land is scarce in these congested localities for any new construction. The KMC's multi-level, underground car parking system at Lindsay Street and the strategies in sustainability is a panacea for such issues.