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# AUGMENTING REVENUES FROM USER CHARGES IN INDIAN CITIES: A CASE FOR DELHI

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## ABSTRACT

User charges have often received significant attention in the literature on local government finances. From the High Powered Expert Committee Report on Indian Urban Infrastructure and Services (HPEC 2011) to the Fourteenth Finance Commission of India, all major policy documents have suggested that levy of user charges should be a major reform agenda for augmenting the revenues from the non-tax sources. Along these lines, the Municipal Corporation of Delhi (MCD) in the budget of 2011 proposed revenue increases from six sources. While some of these relate to modifying the rates of the existing revenue components, there are also suggestions for certain new components to be introduced. Among the components for which hikes from the existing rates are proposed are "parking fees", "one-time street charges", "property taxes", "fees from mobile towers". Among the new components are the "conservancy charges" and the "congestion charges". However due to political unwillingness, none of these recommendations were implemented. This paper attempts to assess the potential financial gains that MCD would have realised, had these recommendations been implemented, even with moderation. Using a simulation based approach with MCD budget data, three scenarios are created: conservative, moderate and optimistic. In the "optimistic scenario", it is assumed that all the recommendations are implemented with goals of property tax reforms also being met, the moderate scenario conforms to the recommendations, and in the conservative scenario, it is assumed that the norms are implemented with some moderation. The simulated revenues and other key indicators of fiscal health in each scenario are compared with those derived from the data available. The main findings suggest that if the recommendations were implemented, MCD could have experienced an increase in the own revenues in the range of 19 to 21 per cent and an increase in the total revenues by around 13 to 15 per cent. Further, instead of meeting 70 per cent of current expenditures in the existing state, own revenues could have covered 77 to 85 per cent of current expenditures. Similarly, the capacity of the total revenues to meet the total expenditures would have also risen from 69 per cent (in the existing state) to about 74 to 80 per cent. Due to a rejection of these proposals, these gains could not be realised. However, in recent years it has been observed that the corporations in Delhi have been making efforts to implement some of these recommendations in varied forms. The hikes in the parking fees in 2014 and increases in the one time parking charges in 2015 in Delhi are examples of such initiatives taken by the corporations to augment their resources.

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**INTRODUCTION**

User charges have often received significant attention in the literature on local government finances. Discussions on user charges have ranged from economic principles of user charges like the suitability of such charges for services whose provision depends on usage, the pricing and design of user charges, efficiency aspect of user charges in a case where the service in question has an elastic demand, to issues like the ability of user charges to augment the revenues of local governments and enable them to meet the ever growing needs of service delivery due to pressures of population, the unpopularity of such charges and the resistance faced by countries that levy such charges (especially developing countries). Introduction of user charges, extension of such levies, better pricing of such charges have often been recommended for urban local bodies in India. While the High Powered Expert Committee Report on Indian Urban Infrastructure and Services (HPEC 2011) has suggested that levy of user charges should be a major reform agenda for augmenting the revenues from the non-tax sources, the Fourteenth Finance Commission has recommended that user charges should be designed properly such that local bodies can at least recover the operations and maintenance costs of services. The Fourteen Finance Commission has reiterated the views of many State Finance Commissions and has further recommended that rates of user charges should be revised periodically and people should be encouraged to pay user charges by educating them on the merits of such charges.

In an attempt to implement some of the recommendations discussed above, the budget speech of the Commissioner of Municipal Corporation of Delhi (MCD) in December 2011 proposed revenue increases from six sources. While some of these relate to modifying the rates of the existing revenue components, there are also suggestions for certain new components to be introduced. Among the components for which hikes from the existing rates are proposed are "parking fees", "one-time street charges", "property taxes", "fees from mobile towers". Among the new components are the "conservancy charges" and the "congestion charges". To state the MCD's recommendations in short: parking fees were proposed to be increased by three times; one-time street charges were proposed to be increased by about three times; charges on mobile towers to be set at Rs.5 lakhs per tower and Rs.1 lakh per service provider in cases where services were shared and property tax rates were to escalate by 3 to 4 per cent with rebates being abolished. However, these recommendations could not be implemented due to political resistance.

In the light of the recommendations stated above, we intend to estimate the potential gains once these recommendations are implemented. The main objective is to establish the argument for a positive role of non-tax sources in augmentation of local revenues in Indian cities with the help of a concrete quantitative exercise. The analysis is based on data collected through primary surveys from the budgets and other information (before trifurcation)[i] from published annual reports followed by interviews and discussions with officials of MCD at different levels.

The paper is organized as follows. Section 2 provides an overview of different aspects of financial performance of MCD. Section 3 estimates the revenue potential based on the proposal for revisions of rates of the existing sources and introduction of new sources of revenues in MCD. Section 4 concludes the paper.

**OVERVIEW OF MCD FINANCES**

MCD covers 94 per cent of the total area of the urban agglomeration of India's capital city. 97 per cent of Delhi's population lives within its jurisdiction. The corporation plays a crucial role in service delivery along with the other parastatal agencies like the Delhi Jal Board and different departments of the state and central governments. For ensuring proper delivery of services, MCD levies certain tax as well as non-tax revenue components, while it also receives resources from the upper tiers. The details are summarized in Box 1 below.

Data from budgets of MCD between 2007-08 to 2011-12 suggest that own revenues have accounted for around 60 to 66 per cent of the total revenues, which have been mainly dominated by the tax revenues. The tax revenues have been dominated by the 'property taxes' and the 'corporation taxes'[ii], while 'tax on consumption, sale and supply of electricity' has also accounted for significant shares in certain years. The important non-tax revenue components have been the 'conversion charges', 'one-time parking charges' collected by the Government of National Capital Territory of Delhi (GNCTD) The transfers comprising of the grants and assigned revenues, have a share of about 35 per cent in the total revenues. The trends in the revenue components suggest that total revenues have experienced a steady rise during the considered period and the trends of the total revenues have been governed mainly by the own revenues. While the transfers and tax revenues have experienced a steady increase over the years, there have been significant fluctuations in the non-tax revenue components. The budget data also confirms that MCD has been focusing on the social sector as a major proportion of its current expenditures on the social sectors like education, public health and sanitation, etc.

Some indicators for financial performance are listed in Table 1 and Table 2 below. Table 1 suggests that the gap between the own revenues and the revenue expenditure has increased since 2007-08 onwards (excepting for 2010-11). It is important to note that the gap has not only increased in absolute terms, but also in per capita terms. Apart from two years in the considered time period (i.e. 2007-08 and 2010-11), own revenues have only been able to cover about 70 per cent of the revenue expenditure. Further, excepting for those two years mentioned above, the own revenue-revenue expenditure gap as a percentage of own revenues has been more than 40 per cent. Total revenues have only been able to cover about 70 per cent of the total expenditure and thereby narrow the existing gap. Further, revenue expenditure gap as a percentage of total expenditure is about 28 per cent implying that total expenditures have to be reduced significantly to ensure that own revenues meet the revenue expenditure.

**BOX 1. REVENUE AND EXPENDITURE HEADS**

| | |
|---|---|
| **OBLIGATORY TAXES** | |
| Property Taxes | |
| Corporation Tax | |
| Tax on vehicles and animals | |
| Milch tax and dog tax | |
| Theatre tax | |
| | Tax on advertisement |
| | Tax on building applications |
| **DISCRETIONARY TAXES** | |
| *Tax on consumption, sale or supply of electricity* | |
| *Toll tax* | |
| Education cess | |
| Land Revenues | |
| Professions' Tax | |
| Betterment Tax | |
| Tax on boats | |
| **NON-TAX REVENUE HEADS** | |
| Law receipts and fines imposed by Municipal. Magistrate | |
| Education fees | |
| Fines and cattle ponds | |
| Fees from hospitals | |
| Fee from rickshaws including compounding fee | |
| Tehbazari | |
| car parking | |
| Fines of offences concerning buildings | |
| Food trade license | |
| General trade license | |
| Factory license | |
| Rents of markets and slaughter fee | |
| Fee from mobile phone towers | |
| Development charges | |
| Road restoration charges | |
| Reimbursement of cost of administrative charges from different schemes | |
| Conversion Charges | |
| Other misc. income | |
| **GRANTS** | |
| Grant in aid for education from govt. | |
| Grant in aid for maintenance of school building | |
| Grant in aid for maintenance of Municipal. Assets | |
| **ASSIGNED REVENUES** | |
| Global share of assigned taxes on recommendations of Delhi Finance Commission from govt. | |
| One time parking charges collected by GNCTD at the time of registration of vehicles | |
| Municipal Reforms Fund | |
| **CURRENT EXPENDITURE HEADS** | |
| General Administration | |
| Licensing | |
| Community Services | |
| Education | |
| Public Health & Medical Relief | |
| Sanitation | |
| Public works and street lighting | |
| Veterinary Services | |
| Horticulture | |
| Land & Estate | |
| Exclusive Development Expenses | |

**TABLE 1. FINANCIAL PERFORMANCE OF MCD: SOME INDICATORS**

| Indicators | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 |
|---|---|---|---|---|---|
| Grants to Total Revenue (per cent) | 15 | 15 | 13 | 11 | 15 |
| Assigned Revenues to Total Revenues (per cent) | 20 | 14 | 14 | 8 | 14 |
| Own Revenue- Revenue Expenditure Gap (Absolute, Rs Lakhs) | 42,530 | 100,184 | 129,701 | 42,571 | 151,626 |
| Own Revenue-Revenue Expenditure Gap (Rs, Per Capita) | 292 | 674 | 855 | 275 | 961 |
| Revenue Expenditure Covered by Own Revenue ( per cent) | 85 | 71 | 67 | 91 | 70 |
| Own Revenue- Revenue Expenditure Gap as a percentage of own revenue | 18 | 42 | 49 | 10 | 43 |
| Own Revenue- Revenue Expenditure Gap as a percentage of Revenue expenditure | 15 | 29 | 33 | 9 | 30 |
| Revenues- Expenditures Gap( Rs Lakhs) | 98,355 | 206,807 | 206,351 | 140,205 | 223,004 |
| Revenues-Expenditures Gap (Rs, Per Capita) | 675 | 1,392 | 1,361 | 906 | 1,413 |
| Total Expenditure Covered by Total Revenue (per cent) | 79 | 62 | 64 | 79 | 69 |
| Revenue- Expenditure Gap as a Percentage of Total Revenues | 27 | 61 | 57 | 27 | 45 |
| Revenue- Expenditure Gap as a Percentage of Total Expenditures | 21 | 38 | 36 | 21 | 31 |

Table 2 suggests that while loan raised have been nil in some of the recent years, loan repayments as a percentage of own revenues and total revenues has been quite high. The average percentage of loan repayment to own revenues between 2007-08 and 2011-12 has been 16.3 per cent, while the percentage of loan repayment to total revenues is 11.7 per cent. However, this percentage has shown a downward trend in these years. Loan repayment has been quite a major burden for MCD. The repayment for loans usually happens from the global share of taxes that the GNCTD provides to MCD. Generally, the amount of the yearly repayment is deducted from the global share of taxes and the residual is passed to the MCD. With heavy repayment burden the amount of the global share of taxes that comes to the MCD has been shrinking resulting into limited resources for making capital expenditures. The average percentage of loan repayments to current expenditure and total expenditure is 12.4 per cent and 8.2 per cent. These percentages have, however, shown a downward trend.

**TABLE 2: LOANS OF MCD: SOME INDICATORS**

| Indicators | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 |
|---|---|---|---|---|---|
| Loans to Own Revenues (per cent) | 7.1 | | | 11 | |
| Loans to Total Revenue (per cent) | 4.6 | | | 8.9 | |
| Loan Repayment Expenditure to Current Expenditure(per cent) | 17.6 | 14.2 | 11.4 | 10.7 | 9.7 |
| Loan Repayment Expenditure to Total Expenditure(per cent) | 10.6 | 8.9 | 7.9 | 7.5 | 6.8 |
| Loan Repayment Expenditure Own Revenues(per cent) | 20.8 | 20.1 | 16.9 | 11.7 | 13.8 |
| Loan Repayment Expenditures to Total Revenues(per cent) | 13.5 | 14.3 | 12.4 | 9.5 | 9.8 |

## ESTIMATION OF UNTAPPED POTENTIAL OF USER CHARGES

The recommendations proposed by the commissioner in the budget speech of 2011 are listed in box 2. Our objective would be to estimate the loss of potential revenues that the urban local body of MCD incurs because of the political resistance faced in levying the additional tax and non-tax instruments proposed.

We attempt some simulations based on the proposed rate structure of the alternative revenue sources as well as the existing ones. We find that rates lower than those proposed by MCD for some sources of revenues can result in financial gains to a considerable extent which enables MCD to narrow down the gap between “total expenditures” and “total revenues”. The present analysis is based on limited data from the budgets of MCD, Delhi Statistical Handbook, Directorate of Economics and Statistics, Central Statistical Organisation and different secondary web based sources with extensive discussions with MCD officials and staff members. We intend to answer a few interesting questions. Can we come up with a set of tax and non-tax rates which would be less drastic than the structure proposed by MCD that would be more acceptable to the tax payers as well as the government? In the process we would build up scenarios through simulations which can prescribe lower rates yet fulfilling the objective of lowering the gap between “total revenues” and “total expenditures” of the urban local body. If there exists one, how would the composition of revenues be shuffled corresponding to that scenario? Can we estimate the component wise gains in “total revenues” resulting from this scenario, if implemented? In the entire process we assume that there is no change in any of the expenditure components.

### Methodology

We start with rates and gains of revenues which are lower than those proposed in the budget speech mentioned above to build up a ‘conservative scenario’. We build up a ‘moderate scenario’ following the proposals in the budget speech. We also build up an ‘optimistic scenario’ adding the maximum property tax potential based on recent estimates of property tax potential by the MCD officials in the ‘moderate scenario’. This

**BOX 2. PROPOSED TAX AND FEE STRUCTURE IN MCD**

**Parking fees**: MCD proposed a hike in rates by about three times which they expect should generate Rs.40 crore annually.

**One-time Parking Charges**: MCD proposed that rates may be raised by 2.5 times for vehicles priced below Rs.4 lakhs; by 3 times for vehicles with prices ranging between Rs.4-10 lakhs and by 5 times for vehicles priced above Rs.10 lakhs.

**Fees from mobile towers**: MCD proposed a fee of Rs. 5 lakhs per tower and Rs.1 lakh per service provider wherever there is a case of sharing of services.

**Conservancy Charges**: On this, the proposal states that conservancy charges should be levied at the rate of 10 per cent of the property taxes (before rebate).

**Congestion Charges**: On this, the MCD proposal states that levying of congestion charges would fetch the MCD Rs.50 crores annually.

**Property Taxes**: MCD proposed hikes ranging between 3-5 per cent in the existing rates of property taxes and abolishing of certain rebates. This whole process is expected to bring in Rs.150 crores to the MCD.

estimate is based on 80 per cent coverage of properties and maximum collections from un-authorised colonies under the jurisdiction of MCD. In the "optimistic scenario", all the other components are same as the "moderate scenario" excepting "property tax". The description of the scenarios and the estimated revenue potentials are given below.

***Parking fees***: For the "moderate" and 'optimistic' scenarios, we have added Rs.40 crores to the existing revenues from the "parking fees" given in the revised estimates for 2011, in order to get the potential revenues. For the "conservative" approach we propose to have a hike of 1.5 times in the existing rate, which adds Rs.15 crores to existing "parking fee" collection. (less than half of Rs.40 crores which is taken in the "moderate" scenario).

***One-time Parking Charges***: In the absence of readily available data on number of vehicles in each price range and an estimate of additional revenues generated by the proposed hike in rates, we assume a flat hike of the rates by 3.5 times for the "moderate" and "optimistic" scenarios. We propose a hike in rates by 2.5 for the "conservative" scenario. The gains in revenues in the "conservative" case are 60 per cent of that in the moderate/optimistic case.

***Fees from mobile towers***: Since we do not have any information regarding the number of the cases where services are shared, we have taken the number of illegal towers under MCD's jurisdiction from a report of the Press Information Bureau, Government of India. For the "moderate" and "optimistic" scenarios we have multiplied the number of illegal towers present by the per tower charge of Rs.5 lakhs to estimate the revenue potential from this source. For the "conservative" case we have only considered half of the total number of illegal towers (assuming that collections can be possible from only half of the total number illegal towers operating in MCD) and multiplied the number by the per tower fee of Rs. 5 lakhs. However, there is a possibility of underestimation of revenue gains from this source as we are not considering the case of shared services.

***Conservancy Charges***: For the “moderate” and optimistic cases we have calculated “conservancy charges” to be 10 per cent of the “property taxes” while for the “conservative” case we have taken “conservancy charges” to be 5 per cent of the “property taxes”.

***Congestion Charges***: For the “moderate” and “optimistic” cases, we have taken “congestion charges” to be Rs.50 crores, and for the “conservative” case we have taken half of this amount (i.e. Rs.25 crores).

***Property Taxes***: For the “optimistic” case, we have added Rs 240 crores to the existing “property tax” collections. For the “moderate” case we have added Rs.150 crores to the existing property taxes and for the “conservative” case we have added Rs.75 crores.

Based on these proposals and assumptions we have calculated the revenue gains and changes in the compositions of the “own revenues” and thus “total revenues” for four scenarios including the “existing” case (where the calculations are based on the latest revised estimates of 2011-12), and the three scenarios created for analysis (“conservative” “moderate” and optimistic).

We have also looked at the adequacy of the revenues to cover the expenditures. We find that if the MCD recommendations were implemented (i.e. in the moderate case) “own revenues” would rise by 19 per cent while the “total revenues” would rise by 13 per cent. In the “optimistic” case “own revenues” would rise by 21 per cent and “total revenues” would rise by 15 per cent (figure 2). This would mean that “own revenues” would rise from Rs. 397,834 lakhs in the “conservative” case to Rs. 472,269 lakhs in the “moderate” case and Rs.482,169 lakhs in the “optimistic” case (table 3). Further, the capacity of the “own revenues” to meet the “current expenditure”, which is just about 70 per cent in the “existing” case would go up to 77 per cent in the “conservative” case, 83 per cent in the “moderate” case and 85 per cent in the “optimistic” case.(figure 1) On similar lines, the capacity of the “total revenues” to meet “total expenditures” rises from 69 per cent in the “existing” case to 74 per cent in the “conservative” case, 78 per cent in the “moderate” case and 80 per cent in the “optimistic” case.

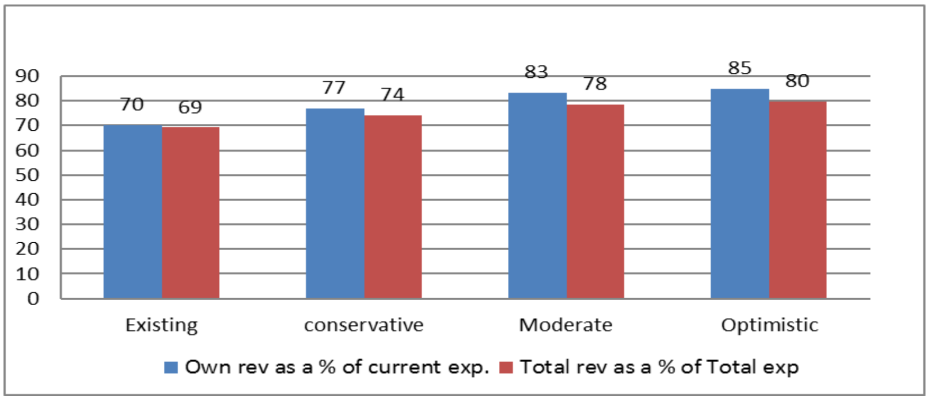
The composition of the “total revenues” also changes once the simulation exercise is conducted. The share of the “non-tax” revenues goes up from 24 per cent in the “existing” case to 31 per cent in the “moderate” case while the shares of “transfers” and the taxes get reduced, implying that the burden is slowly being shifted to the non-tax components. In the “optimistic” scenario the share of the non-tax components falls slightly to 30 per cent as all the gains are in the “tax revenues” through the property taxes.

**TABLE 3. ESTIMATED REVENUES IN DIFFERENT SCENARIOS (IN RS. LAKHS)**

| | Existing | Conservative Scenario | Moderate Scenario | Optimistic Scenario |
|---|---|---|---|---|
| Total Tax Revenue | 263,254 | 270,754 | 278,254 | 287,254 |
| Total Non-tax Revenue | 134,580 | 166,097 | 194,015 | 194,915 |
| Own Revenue | 397,834 | 436,852 | 472,269 | 482,169 |
| Total Revenue | 560,120 | 599,138 | 634,555 | 644,455 |

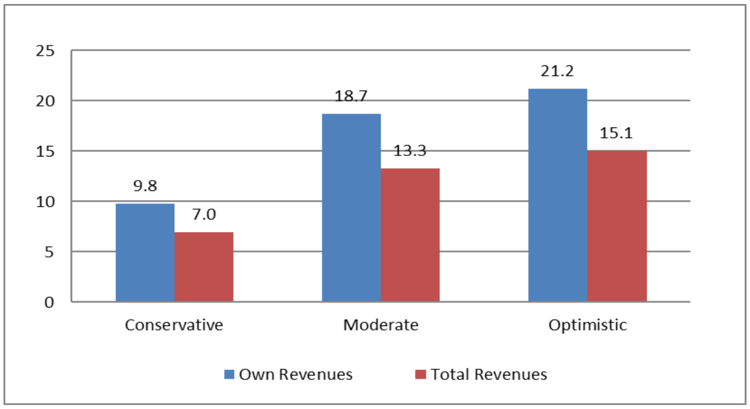
*Source: Municipal Corporation of Delhi, authors' computations*

**FIGURE 1. REVENUE AS A SHARE OF EXPENDITURE**




*Source: Municipal Corporation of Delhi, authors' computations*

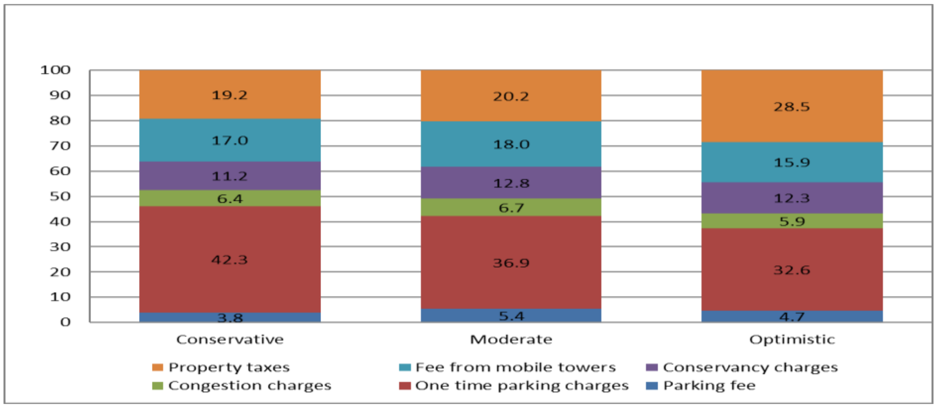
**FIGURE 2. INCREASE IN OWN AND TOTAL REVENUES (PER CENT)**




*Source: Municipal Corporation of Delhi, authors' computations*

It would be interesting to know the distribution of total gains estimated in each scenario according to shares of the components of revenues. We find that the highest proportion of the gains is contributed by the prescribed revisions in the "one-time parking charges" in all the scenarios. Other components which contribute more than 10 per cent as shares in gains are "conservancy charges", "fee from mobile towers" and "property taxes". "Conservancy charges" can contribute to around 6 to 7 per cent of the total gains while "parking fees" can contribute around 4 to 5 per cent of the total gains in different scenarios (figure 3).

**FIGURE 3. COMPOSITION OF GAINS IN THREE SCENARIOS**




*Source: Municipal Corporation of Delhi, authors' computation*

**CONCLUSIONS**

The analysis in the above section suggests that MCD could have experienced a significant increase in its own revenues, if these recommendations of the budget (2011) were implemented. It is also evident that the gains could have been substantial even if these recommendations were implemented with some moderation. The gains would not only have been in terms of higher revenue generation, but also with respect to the ability of the corporation to meet its expenditure with its revenue sources, thereby implying better financial management. Due to political unwillingness, most of these recommendations were rejected in 2011. However, with the trifurcation of the corporation and the ever growing pressure of continuous urbanization, there has been an urge amongst the corporations in recent times to strengthen their revenue bases through increases in non-tax components. For example, in 2014 all the three trifurcated corporations have almost doubled the parking charges to augment their revenues. Further, in 2015, the north MCD also decided to increase the rates of one time parking charges. Although there have not been significant developments with respect to the new non-tax components (like the congestion and the conservancy charges), the much discussed odd-even rule can definitely be looked at as a measure to control pollution by reducing the congestion on roads. People do not have to pay a tax due to the rule, but the implementation of the rule would definitely mean a constraint on the freedom of the people to use their cars. Further, due to the rule people might need to resort to other means of public transport (like cabs and taxi), which could have cost implications for the people of Delhi. However, the odd even rule is also likely to have a negative impact on the revenues of the corporation as the less number of cars would imply lower revenues from parking fees. But, the measures are being tried with a hope that some of this loss will also get compensated as roads are likely to be cleaner than before, and maintenance of roads also might get less expensive. The progress in implementing the recommendation has been quite slow. However, it can be said that corporations have realized the potential gains from implementing the budget (2011) recommendations, and are gradually moving towards tapping the significant revenue gains by their implementations in different forms. Further, it has been recognized that increasing revenues from non-tax sources for the urban local bodies is one of the viable options, as recommended in the Fourteenth Finance Commission. So, moving towards implementing the 2011 recommendations would also imply a compliance with the recommendations of the Fourteenth Finance Commission.

## ENDNOTES

[i] In 2011, MCD was trifurcated and was divided into three corporations, viz North Delhi Municipal Corporation, South Delhi Municipal Corporation and East Delhi Municipal Corporation.

[ii] Duty on Transfer of Properties is collected as 'corporation taxes'. The Government of National Capital Territory of Delhi (GNCTD) collects it and passes on the proceeds to the MCD after deducting a share from it.

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