#### **BUDGET SPEECH**

Distinguish Members of Council, it is my privilege and I feel proud to present to you the Budget of New Delhi Municipal Council for the forthcoming year of 2018-19.

New Delhi Municipal Council (**NDMC**) occupies a unique position among all urban local bodies in India. Although it services a geographic area of only 42 square kilometers, it is responsible for the physical upkeep of the heart of the nation as well as the well being of lac of residents and visitors. This brings to us both challenges and opportunities. Our challenges are mainly self-imposed because NDMC seeks to become a benchmark in terms of service delivery and operational excellence. At the same time, NDMC seeks to demonstrate that it is fully accountable for using all the resources at its disposal in the most optimal way.

Considering these benchmarks for the capital city, I am presenting the Annual Budget 2018-19.

The total receipts of the Budget Estimates (BE) 2018-19 are Rs.3935.91 crore against Rs.3677.24 crore provided in Revised Estimate (RE) 2017-18. The actual receipts in 2016-17 were Rs.3465.20 crore. The BE 2018-19 for the revenue receipts are Rs.3388.71 crore against Rs.3183.53 crore provided in RE 2017-18 and actual of Rs.2996.11 crore in 2016-17. The BE 2018-19 for capital receipts are 547.20 crore against Rs.493.71 crore provided in RE 2017-18 and actual of Rs.469.09 crore in 2016-17.

The total expenditure for BE 2018-19 are Rs.3886.58 crore against Rs.3493.55 crore provided in RE 2017-18 and actuals of Rs.3053.21 crore in 2016-17. The BE for revenue expenditure in 2018-19 are Rs.3382.19 crore against Rs.3178.14 crore provided in RE 2017-18 and actual of Rs.2808.37 crore in 2016-17. The capital expenditure is projected at Rs.504.39 crore in BE 2018-19 (including Rs.66.30 crore in Smart Projects) against Rs.315.41 crore in RE 2017-18 (including Rs.25.66 crore for Smart Projects) and actual of Rs.244.84 crore in 2016-17.

NDMC's strategic priorities will be to retain and reinforce its position as one of the most progressive municipal units in India in terms of sustainability and self-reliance. Hence, I propose that NDMC's mission and overall goal for the coming financial year will be Smart Electronic and Mobile Governance, Smart City Initiatives, Resource Conservation, Smart Social and Physical Infrastructure to make New Delhi a vibrant Smart City.

#### 1. SMART ELECTRONIC AND MOBILE GOVERNANCE

1.1 You can never solve a problem on the level on which it was created. You have to rise above it to the next level. I am of the view that in public service, electronic (e) and mobile (m) governance are one of the most efficient and effective tools to improve municipal

delivery system to the next level and to solve problems being faced by the citizens. The goals set by NDMC as a part of e-Governance and m-Governance are as under:

- i. Better service delivery to citizen;
- ii. Ushering in transparency and accountability;
- iii. Empowering its citizen through information;
- iv. Improving efficiency.
- 1.2 NDMC is making continuous efforts towards computerization of all departments and making its services online to reduce human interface and delivery time, for better services to its citizens and eliminate inefficiencies through increased transparency, accountability, responsiveness and monitoring.
- 1.3 IT based initiatives taken during the year 2017-18 and proposed to undertake for good governance towards equity, efficiency and effectiveness in a transparent manner through technology intervention for strengthening of e-Governance and m-Governance during the year 2018-19 are as follows:

#### 1.3.1 Municipal Services and Grievance Redressal through Mobile App

- 1.3.1.1 For resolving the complaints / grievances in prompt and transparent manner and receiving feedback from citizens, and to provide integrated public services, a user-friendly mobile cloud based Mobile App NDMC 311 was launched by NDMC in March 2016. Currently all major civic services are available on this App and overwhelming response from the citizens has been received. Available on Android & IOS Platforms, the NDMC 311 Citizen App has been downloaded by more than 30,000 users since its launch in March 2016.
- 1.3.1.2 Public may file their grievance through NDMC 311 Citizens App by using mobile after selecting the type of issue, such as water, electricity, sanitation, sewerage, waterlogging, damaged roads, street-lights maintenance, etc. NDMC 311 App, on the basis of the GPS location of the user and the type of issue, maps the grievance to the concerned NDMC official for taking necessary action. The complaint is routed to a field monitoring Smart City 311 Officers App operated by the officials of the municipality for prompt resolution. This comes with an SMS facility so that the citizen gets acknowledgment of the receipt of complaints. The citizens can gets real time updates about the resolution of a grievance, the complaint can be monitored and closed for their satisfaction. This helps in raising the citizen's satisfaction. The geographic position and image capture enables city officials to address and resolve the complaint quickly.
- 1.3.1.3 The response on NDMC 311 App is overwhelming, and 40772 issues were received upto 09.01.2018 through this App, out of which 40456 issues (99.22%) have been resolved. Civic services like payment of services, OPD registration, online medical stock viewing, online water quality monitoring, etc. are some other features of the NDMC 311 Citizens App.

1.3.1.4 I am proposing to further strengthening of public service governance to improve redressal of public grievances and user experience through NDMC 311 Citizens App in the year 2018-19.

#### 1.3.2 Mobile e-Challaning

In order to streamline and fast track the procedure of mobile challaning, the module of Mobile e-Challaning has been introduced through NDMC 311 Officers App in the year 2017-18 to enable the officials to issue e-challans at site on real-time basis thereby considerably reducing the time in imposition of fines by the Metropolitan Magistrates. This Mobile App enables mobile based monitoring of core municipal functions / field inspections. In the year 2015-16, when manual process was applicable, Rs. 34.77 Lakh were collected as fines/penalties against issuance of 11,185 health challans. After introduction of m-Challan module through the NDMC 311 Officers Mobile App during the year 2016-17, NDMC realized fine/penalties to the tune of Rs. 61.87 Lakh against 12,542 challans.

1.3.3 NDMC has started rendering multiple services through IT based e-governance platforms, such as online Building Plan approval, online issuance of 'free of cost' Birth & Death certificates, on-line payments for electricity-water bills, property taxes and other online services such as yellow fever vaccination appointment, online availability and booking of barat ghars and other NDMC's event management spaces, OPD registration, online medical stocks availability, online demand based e-waste disposal etc. NDMC is taking big strides in moving to mobile platform for rendering citizen services.

#### 1.3.4 NDMC online services integration with UMANG app of MIETY

**UMANG** (Unified Mobile Application for New-age Governance) is an application envisaged to make e-governance 'mobile first'. It has been developed by Ministry of Electronics and Information Technology (MeitY) and National e-Governance Division (NeGD). It is an evolving platform designed for citizens of India to offer them access to the online citizen centric services. NDMC integrated 03 of its applications i.e. Baratghar booking, appointment for Yellow fever vaccination and online printing of Birth & Death certificates with UMANG App, which went live on 28.05.2017. Hits for the above services till date are:-

(i) Baratghar: 54,509 Number

(ii) Yellow fever vaccination: 3180 Number (iii)Birth and Death Certificate: 1,63,707 Number

#### 1.3.5 Geotagging of Public Toilet Units

278 Nos. Public Toilet Units (**PTUs**) have been put on GIS Map to locate / track the nearby toilets through Google Locator out of 333 PTUs in NDMC area in 2017-18. Remaining PTUs would be tagged by March 2018.

#### 1.3.6 Introduction of e-measurement book in Engineering Department

Software providing online measurement of works relating to Civil, Electrical & Horticulture Departments is carried out on a pilot basis. It would enable better review of the performance

of the field staff looking after these activities through on line system and on real time basis. I am proposing it to be mandatory in Engineering Departments in 2018-19.

#### 1.3.7 Development of software for municipal housing allotment

The first phase of online Municipal Housing Allotment has been successfully developed and implemented for the Municipal Employees. It helped in increasing transparency in the process of allotment of Municipal Accommodation to its employees.

#### 1.3.8 Online Road Cutting Permission System

An online application portal for the customer seeking Road Cutting Permission was developed and implemented to make the service user friendly and smooth.

#### 1.3.9 Name inclusion of birth through AADHAR Authentication

An application for inclusion of name in the Birth certificate through AADHAR based authentication was developed and was made available to the citizens. Through this application a citizen can include the name of its child (0-12 months) free of cost in the birth certificate. This application is very people friendly because the birth certificates are made on the basis of the data provided by the Hospital at the time of the Birth of child itself when its name has not been decided.

#### **1.3.10** e-Office

- 1.3.10.1 During 2017-18, the concerted efforts were made to implement e-office in NDMC. As a first step the electronic system for tracking of files and receipts was introduced. The e-File system consists of:
  - (i) File Monitoring System (Physical File);
  - (ii) Letter Monitoring System (Dispatch & Diary work);
  - (iii)Proper channel routing; and
  - (iv)Tracking of physical files.
- 1.3.10.2 e-Filing System has been introduced in many departments in NDMC till 31.12.2017 and will be extended to remaining departments so that every official/ officer is linked with this system to watch the movement of files by March, 2018.
- 1.3.10.3 As a second step towards implementation of Office Automation System (e-office) in NDMC, it is proposed to implement the following modules during the coming financial year:
  - (i) Creation and movement of Electronic Files in a major departments of NDMC
  - (ii) E-Leave
  - (iii)Personnel Management Information System (PIMS)
  - (iv)Court Case Management System (CCMS)
  - (v) Pension Module to facilitate the pensioners
  - (vi)Knowledge Management System (KMS) to track and store electronic documents and/or images of paper documents i.e. online repository, and access to critical database for authorized users

- (vii) Collaboration and Messaging Services (CAMS) Scheduling appointments meetings, events and conventions etc.
- 1.3.10.4 These steps will further help in order to ensure transparency and accountability in the conduct of business by NDMC.
- 1.3.10.5 For this purpose, sessions of training for officials/ officers of NDMC were conducted in collaboration with NIC and data base for the employees as well as the records was created. Further, Functional File Numbering System on the pattern of Government of India was introduced in NDMC. These steps will help in long way in coming future in order to ensure transparency and accountability in the conduct of business by NDMC

#### 1.3.11 e-Hospital

- 1.3.11.1 Medical Services Department has implemented e-Hospital Project of NIC in both the hospitals of NDMC. All major modules of e-Hospital are functional e.g. registration of patients, online appointment, registration of patients in casualty round the clock, lab modules, indoor modules etc. As a result, one can monitor the number of patients visited the Hospital on real time basis.
- 1.3.11.2 e-Hospital application provided by NIC has been successfully implemented in NDMC Hospitals, Dispensaries, Polyclinics, AYUSH Centers and Central Medical Store. The following modules have been implemented:
  - (i) Patient Registration (OPD & Emergency) Module
  - (ii) Billing module
  - (iii)ORS (Online Registration System) Module
  - (iv)Lab Module
  - (v) IPD (Admission/Transfer/Discharge) Module
  - (vi)Pharmacy & Central Medical Store Module

## 1.3.12 e-Commissioning of tablet based on near time based feedback mechanism in Public Toilet

For feedback mechanism, 100 Nos. tablets have been installed in PTUs/CTUs and 231 No tablets have been procured and the installation work shall be completed by January, 2018. The 3,59,864 feedbacks received in 100 such public toilets during the period 10.08.2017 to 01.10.2017 are very encouraging.

- Clean: 2,95,938 response (82.24%)
- Dirty: 63,926 response (17.76%)

#### 1.3.13 Unique Smart Addressing Solution For Urban Properties / Establishments

The objective of Unique Smart Addressing Solution For Urban Properties /Establishments (USASUP) is to provide NDMC with a Unique Smart Sequential addressing Solution for Urban Properties / Establishments depicting an Alpha Numeric Smart Address code for each property/ establishment in New Delhi with the information of main road, sub road/lane,

Landmarks building and the floor. A Geo-spatial based solution has been proposed keeping in mind the benefits of providing navigation details and address location services along with the linkages of metadata with attributes for features such as electricity/water property tax license fee, type of construction occupant's/owner's details etc. The properties shall be affixed with USASUP plate/sticker.

#### 1.3.14 Online Mutation of Properties

The department has nearly completed work on the mutation module and will soon update land records. Apart from this, the department is looking to end inconvenience. Once the applicant applies for mutation, a notice for hearing will be generated online through the software, and intimation of mutation order will be sent to the applicant on their registered mobile number.

#### 1.3.15 Purchase of Kiosks for Schools

NDMC is going to procure 62 nos. of Information kiosks for NDMC schools to obtain the information related to curriculum and other related information.

#### 1.3.16 Implementation of online Health Licenses in NDMC

Online health application module has been developed and very soon it would be implemented. The application for grant / renewal of Health Licences for food-related businesses, regardless of size, shall be applied and issued online.

#### 1.3.17 Online Booking

It is proposed to make the following processes 100% online in the year 2018-19 and citizens will be able to book these services online only without any manual intervention:

- Payment for booking of Barat Ghars
- Booking of NDMC's Water Tankers alongwith payment
- Booking of Community Centre alongwith payment
- Booking of Different NDMC venues for Public Events alongwith payment

#### 1.3.18 Online applications for electricity and water connections

It is proposed to completely digitize the process of applying for electricity and water connections in NDMC in the year 2018-19. This system will be 100% online with definite timelines within which the Departments concerned will grant sanctions to citizens applying for these services from the year 2018-19. This project has been carefully designed to ease the application process and to prevent the citizen from having to run from pillar to post.

1.4 In the Budget 2017-18, it was proposed to strengthen the IT Department of NDMC. In this regard, requisite work has been done to frame recruitment rules with increased strength, which will be placed before the Council for consideration by March, 2018, so that further steps may be taken to strengthen the IT Department of NDMC. In 2018-19, I propose to allocate Rs. 14.13 crore towards Information Technology Department. Of this, Rs.11.30 crore will be towards capital expenditure and Rs.2.77 crore towards revenue expenditure.

#### 2. SMART CITY INITIATIVES

2.1 The Government of India Smart Cities Mission is not a municipal event but a national movement geared towards improving the quality of civic services in India. Having been chosen as one of the "lighthouse cities" for this Mission, I am proud to say that NDMC has achieved significant progress in this regard. Various works were conceptualized last year under the smart city mission. Those works are now either completed, or in progress, except for very few which are in the tender stage. The SPV has already received a grant of Rs. 194 crore from MOUD. NDMC has contributed Rs.150 crore to the SPV as its shares during financial year 2016-17 and 2017-18. Further, a budget provision for further transfer of Rs.50.00 crore in Revised Estimates 2017-18 and Rs.50.00 crore in Budget Estimates 2018-19 has been made.

#### 2.2 Making NDMC 100% Renewal Energy Powered Smart City

- 2.2.1 To become 100% renewal energy powered Smart City, it is proposed to move towards running NDMC on 100% on clean power in the first phase, wherein coal power of NTPC Dadri will be replaced by Bio-mass power from NTPC Dadri and gas power will be sourced from PPCL, Delhi.
- 2.2.2 It is proposed to procure long term 250MW solar power and 200MW hydro power, for which NDMC is envisaging to procure 250 MW of solar power from NTPC @ Rs.3.14 per unit, and the plant is likely to be operational by end of the year 2018-19. Though, NDMC will be fully operational on clean energy, however, occasional spurt in requirement will be met from power exchange.

#### 2.3 Smart Solar Initiatives

2.3.1 NDMC has developed the following world class projects in the NDMC area during the year 2017-18:

#### 2.3.1.1 Bus Queue Shelters

Two Bus Queue Shelters (**BQS**) at Shanti Path have been constructed based on the concept of solar energy at the cost of Rs.28.60 lakh/BQS in collaboration with Central Electronics Limited (**CEL**), a Government a Public sector enterprises. The transparent BQSs, first of its kind in the Country, have been designed and built in collaboration with Steel Authority of India (**SAIL**). The roof and the back panels of each BQS clad in innovative and transparent photovoltaic glass with supporting structure made up of stainless steel of 304 grade, are capable of generating 3.6 kW, and each BQS is likely to generate more than 6000 kW-hours per year. It is proposed to set-up four such Bus Queue Shelters at Shanti Path in the NDMC area during the year 2018-19 in collaboration with CEL and SAIL.

#### 2.3.1.2 Solar Road

One Solar Road of 380 sq. m., based on the concept of solar energy, has been constructed as a pilot project at the cost of Rs. 15 lac approx. in the year 2017-18 in collaboration with CEL.

There are total 704 Solar Panel of size 660mm x 450mm capable of generating 14.08 kW solar power.

#### **2.3.1.3 Solar Tree**

A stainless steel (304 grade) Solar Tree has been built up in collaboration with CEL and Steel Authority of India (**SAIL**) in the year 2017-18. The Solar Tree has 9 petals, top of which are covered with flexible solar panels. The Solar Tree has sitting area for 16 persons, and is equipped with IP 67 Digital Interactive Panel, LED Lights and charging points for mobile phones. The Solar Tree is capable of generating 1.26kW solar power. It is also proposed to construct four such Solar Trees in NDMC area during the year 2018-19 in collaboration with CEL and SAIL.

#### 2.3.1.4 Solar Integrated Lighting Poles

First time in India, 35 number Solar Integrated Lighting Poles have been installed at prominent round-abouts in NDMC area in the year 2017-18, and work has been awarded to install further 60 such Solar Integrated Lighting Poles at the remaining round-abouts, which will be completed in the year 2018-19. Such Solar Integrated Lighting Poles are of 4 meter height with upper 2 meter height of inbuilt solar PV module, which will generate 180 watt power/pole/day and its lower part having control system with lithium battery of 60Ah. The LED light of 25 watt is mounted on the pole.

### 2.3.1.5 Smart Rooftop Solar Initiative

- 2.3.1.5.1 Energy is the prime mover of economic growth and is vital to the sustenance of a modern economy. Sustainable development requires long term availability of energy from sources that are affordable, accessible and environmentally friendly.
- 2.3.1.5.2 NDMC has been giving thrust for rooftop solar initiative and because of these efforts, has covered all of its buildings and at present a total of 8.5 MW solar rooftop is installed in NDMC area including the net meter projects.
- 2.3.1.5.3 To tap the potential of clean and green energy in NDMC though roof top solar of private and institutional buildings, NDMC has signed an Memorandum of Understanding (MoU) with Energy Efficiency Services Limited (EESL), a joint venture of four National Public Sector Enterprises NTPC Limited, PFC, REC and POWERGRID, and was set up under Ministry of Power, and offering a unique model for such clientele, which is first of its kind in the country.
- 2.3.1.5.4 In this RESCO mode based model, the rooftop owner need not to bother for anything except giving permission for installation of solar project on rooftop. EESL has to bear the upfront cost and the rooftop owner has to pay for per unit generation @ Rs. 4.37 per unit, which is to be paid through regular electricity bill. NDMC and EESL has devised a tripartite agreement for 25 years for implementation of these projects. It is envisaged to sign tripartite agreements with the interested parties in the year 2018-19.

2.3.1.5.5 Implementation of the project will aid in reduced dependency on the fossil fuels and will accelerate the usage of renewable energy sources for Government/ Institutional buildings under NDMC area. The Projects will reduce peak energy demand thus contributing to overall sustainability.

#### 2.3.1.6 Electric Vehicles

- 2.3.1.6.1 Depleting air quality and greenhouse gas emissions requires Indian cities and particularly New Delhi to shift from internal combustion engine vehicles to more environment-friendly but cost-effective transport solutions. The country is actively exploring cost effective and viable solutions to the problem of poor air quality in a number of its cities as well as reducing its excessive dependence on oil imports. The India has announced a significant shift to an all electric fleet by 2030.
- 2.3.1.6.2 In this endeavor, NDMC is procuring 80 electric vehicles (EVs) through EESL, which has recently floated a tender for 1000 vehicles. In collaboration with EESL, NDMC is installing 28 AC Chargers and 9 DC chargers in different NDMC buildings for captive use. The DC chargers are fast chargers and are capable of charging a vehicle fully in 1½ hours. Till dated, 24AC Chargers and 7 DC Chargers have been installed and balance will be installed by March, 2018.
- 2.3.1.6.3 Considering future business potential, the smart city Company is envisaging to install 10 DC chargers initially in the year 2018-19 for commercial public operation.

#### 2.3.1.7 Smart Street Light Poles with free Wi-Fi

- 2.3.1.7.1 NDMC has taken initiative for transformation of electric poles into Smart pole with Smart Warm LEDs having incident driven controllers, communication infrastructure, Wi-Fi access points, environmental sensors, CCTV cameras, and work has been awarded for 55 Nos. Smart Street Light Poles of height 9 to 12 meters in the year 2017-18. These smart poles are made of stainless steel having facilities to host microcells for telecommunication for providing 2G/3G/4G services, and hydraulically operated underground cabinet, which is IP 65 for hosting telecom equipment and UPS. These smart poles are being installed in Connaught Place, Baba Kharak Singh Marg, Sansad Marg, Janpath, K.G. Marg, Barakhamba Road, Tolstoy Marg and nearby area.
- 2.3.1.7.2 The concessionaire will pay to NDMC a concession fee of Rs. 2655/- per month per smart pole. 25 numbers of Smart Poles have already been installed in inner and middle circle at Connaught Place, Baba Kharak Singh Marg and Janpath, and work is likely to be completed by March 2018.
- 2.3.1.7.3 It is proposed to install such smart Poles under PPP model at multiple locations in NDMC area to make available free Wi-Fi to the public, alongwith CCTV surveillance and environment monitoring in the year 2018-19.

#### 2.3.1.8 Digital Interactive Information Panels

- 2.3.1.8.1 Work has been awarded in the year 2017-18 for installation of 50 Outdoor Digital Interactive Information Panels to connect digitally with the online services provided by various government bodies in lieu of advertisement rights in NDMC area under PPP model for concession period of nine years. The project includes:
  - (a) Free Wi-Fi to the public in a minimum radius of 25 meter area from each of such panel.
  - (b) Mobile charging points
  - (c) Large size LCD/LED display of 75" inches (75") for displaying advertisement.
  - (d) Digital Interactive Touch Screen of 46" inches (46") with Internet connectivity for displaying information for public
- 2.3.1.8.2 The project will result into easy access to various online public services at any time to the public at large through Digital Interactive Touch Screen. The work is likely to be completed by March, 2018.

#### 2.3.1.9 Public Bike Sharing System

- 2.3.1.9.1 The work of Public Bike Sharing System in NDMC area under PPP model has been awarded for installation of 50 number of Bike Sharing Stations with the availability of 500 Smart Bikes for a concession period of nine years. Bikes will be intelligent, vandalism proof, locking & unlocking through Mobile app, RFID Tag, and real time GPRS enabled control. The bike terminals shall be of automatic and state-of-the-art design as per International Standards.
- 2.3.1.9.2 About 24.5 km road stretch / cycle track will be covered and metro station, office complexes, markets and tourist places will be linked through cycle track route. Smart bicycle will be taken from any station and will be deposited at any station for the benefit of small distance commuter and last mile connectivity. The dedicated cycle track / cycle lane marking will be done under the Smart Road Projects for the safety of commuters. It is proposed to connect all the important destinations / public places, metro stations, markets. The work is likely to be completed by June, 2018.

#### 2.3.1.10 Digital Information Panels

- 2.3.1.10.1 Work has been awarded in the year 2017-18 for 50 Outdoor Digital Information Panels to provide information in lieu of advertisement rights in NDMC area. The project includes:
  - (i) information to citizen;
  - (ii) mobile charging point facility;
  - (iii)free Wi-Fi to 25 users per screen simultaneously;
  - (iv)concessionaire will share revenue @ Rs. 15,300/- per month per panel to NDMC.
  - (v) corners of the arches will remain clean due to installation of these screens.
- 2.3.1.10.2 This project is on PPP model wherein the concessionaire will invest the amount in creating infrastructure and will maintain for nine years. It is a self sustainable

project. In Smart City, projects should be such which can generate revenue, otherwise, project cannot sustain for longer duration on Government funding.

2.3.1.10.3 The work is likely to be completed by March, 2018. It is proposed to have 75 more Outdoor Digital Interactive Information Panels in NDMC area to bring the online service at the door during the year 2018-19.

#### 2.3.1.11 Integrated Command and Control Centre

- 2.3.1.11.1 The work for finalization of vendor for the work for setting up dedicated Command and Control Centre & Data Center, and integration with various ERP, Smart City and NDMC Applications started in the year 2017-18. Scope of work includes:
  - (i) Design, built, supply and Installation, operation & maintenance of Central Command & Control Centre (ICCC) and Data Centre with appropriate hardware like video wall, servers, cyber security devices, and software, networking for viewing, analyzing, storing and retrieval of the data for various Application and services. Integration of ICCC software with various ERP like Property Tax, Estate module, e-Finance, Health Licenses, Smart City Applications like Smart Classrooms, SCADA for water and electricity, Smart LED street lights, Garbage Bins, GPS based vehicle tracking system, Smart Parking, e-Hospital, Building Plan approval, Birth & Death certificates, Barat Ghar Booking sensor data and GIS platform.
  - (ii) RFID based Solid Waste Management System for 75000 households and 1870 Bins in NDMC area.
  - (iii)Development of ERP applications like Property Tax, Estate module, e-Finance, Health Licenses.
  - (iv)Providing and installation of 500 surveillance cameras at outdoor locations in NDMC area.
  - (v) Helpdesk service and call centre for public complaint redressal throughout contract period on 24 X 7 X 365.
  - (vi)Operation and Maintenance for five years.
- 2.3.1.11.2 Two bids have already received and process of awarding the work would be finalized by March, 2018. It is expected that the work of dedicated Command and Control Centre will be completed in the year 2018-19.

#### 2.3.1.12 Smart Parking

- 2.3.1.12.1 Work has been awarded in the year 2017-18 for implementation of Smart Parking Project (Phase I) for on street, off street and indoor Parking Spaces in NDMC area under Public Private Partnership (**PPP**) model for the concession period of seven years. This project includes:
  - (i) magnetic-cum-optical or magnetic-cum-IR sensors at each of the parking slots for Cars for every on street and off street parking, base station/ gateway, network routers/switches, smart parking equipment with hand held devices, automatic pay stations and boom barriers for off street and indoor/underground parking;

- (ii) CCTV based surveillance system, including online data transfer on demand, and CCTV footage to central control room for on street and off street parking lots on demand by NDMC;
- (iii)Central Control Centre including Data Centre with appropriate hardware and software for monitoring and managing of Smart Parking, and viewing, analyzing, storing and retrieval of the CCTV feed;
- 2.3.1.12.2 The work of Phase I of the Smart Parking Project is likely to be completed by March, 2018. Concessionaire have to share 61 % of revenue, subject of payment of minimum monthly payments of Rs.75 lakh for 5392 (Four Wheelers) & 2237 (Two Wheelers) ECS. Tender for remaining NDMC area has already been floated as Phase II of the Smart Parking Project. It is proposed to convert all parking lots in NDMC area into smart parking lots in the year 2018-19.

#### **2.3.1.13 Smart Roads**

- 2.3.1.13.1 Roads, which are smart, convenient to the citizens and pedestrians, are the need of the time. It is proposed to have roads for smooth and safe movement of motorized, pedestrian and non-motorised vehicles traffic with features like cycle tracks, better landscaping, street furniture, plazas eateries, pelican crossing, 3D Zebra crossings, parking, signages road markings, bus stops, landscaping lighting, greenery, public toilets, drinking water facilities etc.
- 2.3.1.13.2 In the first face proposal of 35km Avenue roads being prepared by the consultant appointed by NDMC, work on one road i.e. Minto Road will be likely to start in month of January, 2018 and which will be completed also in this financial year 2017-18. Further the Improvement on Janpath Road, Mother Teresa Crescent, Panchkuain Road, Chemsford Road, Barakhamba Road, Maulana Azad Road, & K.G. Marg will be taken up in year 2018-19.

#### 2.3.1.14 Beautification of Roads

The tri-colour state-of-the-art fountains at 11 Murti has been commissioned to enhance the grandeur of the heritage area, which is highly appreciated by the public. Two fountains along the Sardar Patel Marg at prominent junctions are being installed to enhance the beauty of area toward Ridge side. Work is likely to be completed in January, 2018. The old water bodies in between the Kautilya Marg Round about is being revived with the provision of three high straight water jets. Water Jets will be lustier with LED lights and will give a vibrant look to the round-about and will enhance the beauty of Shanti Path. The vibrant and thick fountains will be one of most pleasant round about in the area. The project is likely to be completed in January, 2018. Similar works would be continued in the year 2018-19 for which a provision of Rs. 10 crore has been made. A colourful Musical Fountain has been constructed in the year 2016-17 at a cost of Rs. 2.00 crore with 2D system in 4 water bodies in Central Park, Connaught Place. The fountains, which run between 6:00 P.M and 7:30 PM are being greatly appreciated by visitors to the park.

## 2.3.1.15 Development of Green Area at Yashwant Place Corner with fountains and reviving of existing fountain at Panchsheel round-about

The corner area of Yashwant Place shopping Complex is being developed as one of the green area having long fountains with thick geysers water jets and colourful LED lights and the existing water body / fountains at the round-about at Panchsheel Marg will be revived with advanced water conservative design for fountains and thick water columns of height 30 feet with LED lights. The tenders are being invited to complete the work by June, 2018.

#### 2.3.1.16 Smart Street Furniture

The precast / stainless steel and customized standard street furniture's will be installed across the road and at public places in NDMC area. The Smart Street Furniture's such as Planters, Benches, Signages, Police Booth, Kiosk, etc. will be provided to transform the public area to a more livable, safe, commuter friendly place. The design of Smart Street furniture's will be state-of-the-art, requiring least maintenance, durable and will gel with the surrounding heritage look. It is proposed to take stainless steel furniture through SAIL.

#### 2.3.1.17 Uniform NDMC Kiosks

NDMC has 80 kiosks of size of 6 x 6 sq. ft., etc, which have been constructed by NDMC and allotted on a licence fee basis. A need has been felt to bring uniformity and improvement in their structures and accordingly, it is proposed to replace all NDMC kiosk in two phases, i.e. 50% in the year 2018-19 and rest 50% in the year 2019-2020 by precast structures made of durable quality product.

#### 2.3.1.18 Facade upliftment of NDMC markets

NDMC markets caters to the daily needs of residents, provides employment to thousands of people and generate revenue for NDMC. With time, many NDMC markets need face uplifting work not only to improve their look but also to provide a pleasant atmosphere to visitors of these markets and bring uniqueness. It is, therefore, proposed to uplift the facade of NDMC markets in a phased manner.

#### 2.3.1.19 Smart Bus Queue Shelters

NDMC has already provided 197 Bus Queue Shelters made of Stainless steel compatible structure with international standards at different locations in its area on PPP Model which are self stainable for their operation and maintenance. There are about 20 more such locations in NDMC area where the DTC has already provided Bus Stops for the ease of the Public, but no Bus Queue shelter exist at these 20 locations. It is, therefore, proposed to augment such facilities by providing Smart Bus Queue shelters in these 20 locations, having facilities such as micro towers to provide free Wi-Fi, LED display of Temperature and Air quality index, installation of real time bus information system, mobile charging station, digital screen and input interface for accessing city information etc. under the PPP model with no cost to NDMC.

#### 2.3.1.20 Smart Public Toilet Units

NDMC had taken up construction of 149 Public Toilets units including 109 smart public Hygienic centre having features like Bank ATM, Water ATM, Non- invasive body basic

vitals testing (ECG, Blood Pressure, Glucose test, Body temperature etc.) under PPP Model and self sustainable operation and maintenance. Out of 149 Public Toilets Units, 85 units have already been completed and 25 more are likely to be completed by March, 2018. The remaining 39 PTU's shall be completed in the Financial Year 2018-19.

#### 2.3.1.21 Installation of Water ATMs

To provide good quality potable water to visitors in NDMC area, 37 Water ATMs were installed in the year 2017-18. These Water ATMs are equipped with coin and RFID based water dispensing. The water quality is as per ISI standards in this regard and is available on a very reasonable rate. Major water quality parameters like PH, TSS and Temperature is displayed continuously on a LED screen. Response from public is very encouraging, therefore, I am proposing to set-up at least 50 such Water ATMS under PPP model in the year 2018-19.

# 2.3.1.22 Waste Water Management/ Treatment for Reuse of Water for Horticulture purpose - Decentralized Sewerage Treatment Plants at 10 Locations in NDMC area

- 2.3.1.22.1 NDMC is a greener area in comparison to other areas of Delhi. Almost 50% of NDMC area is green. It is a challenge to maintain this green area as the availability of water is limited. Any additional source of water is also rare. So, NDMC has decided to construct its own decentralized Sewerage Treatment Plants (STPs) so that the treated water can be made available at the point of requirement of sewage. But another challenge is the maintenance of these STP's. The NDMC has entrusted the job of construction and maintaining these STP's to private players under PPP model and has therefore saved its resources by cutting maintenance labour. By constructing STP's NDMC is re-using the water and thus solving the problem of the portable water in Delhi and also maintaining its greenery through irrigation with this treated water.
- 2.3.1.22.2 This is the first step towards construction of decentralization of STP's in NDMC area i.e. the project for construction of sewerage treatment plant, 100 to 500 KLD capacities at 10 different locations in NDMC area based on the places of requirement of treated water and availability of the sewerage under PPP model. Normally the STP's are got constructed by the departments by investing on Capital Cost. Thereafter, nobody bothers about the quality and quantity of the treated water from these STPs. To ensure the regular supply of treated water of desired quality NDMC has planned to go for implementation of these STP's on PPP model where the concessionaire will invest on these STP's and do operation and maintenance for 12 years. NDMC will pay to the concessionaire based on the quality and quantity of the treated water.
- 2.3.1.22.3 The basic innovative aspect of the cited project is execution of these STP plant under PPP model where all the capital investment have been done by the Concessionaire alongwith all cost of operation and maintenance throughout Concessionaire period and meeting the parameters of the treated water to the desired levels. NDMC is paying for the treated water on monthly basis after checking the desired parameters of the treated water and

its quantity. For non achieving of the treated water standards and quantity, a penalty will be imposed.

- 2.3.1.22.4 NDMC has awarded the work for construction of 10 Nos. STP's of total capacity 3.10 MLD (Individual STP's are of 100 KLD to 500 KLD Capacity) on PPP model in 2017-18. Seven such STP's are completed. Work at two STP's are at final stage which would be commissioned in January 2018. The last STP in this category could not be started for want of land. It is expected that work on the 10<sup>th</sup> STP will be started by March 2018 and will be completed by June, 2018.
- 2.3.1.22.5 Parameters of the treated water will be BOD<10, PH Value 6.5 to 8.5, TSS<20.

#### 2.3.1.23 Decentralized Phytorid Technology based STPs in schools

- 2.3.1.23.1 NDMC has signed MOU with National Environmental Engineering Research Institute (NEERI) to provide consultancy for construction of STP's with PHYTORID Technology. Phytorid Technology is a self-sustaining technology developed by National Environmental Engineering Research Institute that works on the principles of natural wetland.
- 2.3.1.23.2 PHYTORID systems are based on natural treatment methods and have distinct advantages over conventional treatment plants. Advantages of Phytorid Technology is that it has low Capital cost and a minimal operating cost due to lack of electrical and mechanical operated parts and no dedicated manpower is required.
- 2.3.1.23.3 One such STP of capacity of 60 KLD, has been constructed at N. P. Girls School, Gole Market on pilot basis in the year 2017-18. I am proposing to construct three more such STPs including one in N. P. Senior Secondary School, Laxmi Bai Nagar, New Delhi in the year 2018-19.

#### 2.3.1.24 World Class sports facilities at Shera Maidan, Mandir Marg

It is proposed to develop recreation and sports facilities in NDMC area in Green Belt known as Shera Maidan by providing the facilities like Synthetic Football Field, Tennis Courts, Jogging Track, Outdoor Gymnasium and Toilet Block. The work will be completed in the year 2018-19.

#### 2.3.1.25 Open Gyms in Public Parks

2.3.1.25.1 Open Gyms provided at 58 location during 2017-18. At Lodhi Garden, open gyms for Divyang Persons have been set-up in the year 2017-18, first time in National Capital Territory of Delhi. Two open gyms with specific equipments, one at Nehru Park and another at Lodhi garden, have been set-up in the year 2017-18 under CSR activities in collaboration with Lions Club International Foundation for specific modern day diseases, such as cardiology and diabetes.

2.3.1.25.2 It is proposed to set-up Open Gym for children in four NDMC parks, namely, Nehru Park, Sanjay Lake, Lodi Garden and CWG Park in the year 2018-19. It is proposed to further set-up open gyms at more 58 locations in NDMC area at the cost Rs.1.75 crore in the year 2018-19.

#### 2.3.1.26 Development of Modern Nurseries

It was proposed to develop two state-of-art Modern Nurseries in the year 2017-18, against which three modern nurseries at Uma Shankar Dixit Marg, Madhu Limya Marg and Lodhi Garden have been commissioned at the cost Rs.125 lac in the year 2017-18 to provide the sampling and the cutting plants for flowering and maintenance of Green Cover in NDMC area. In Green House Technology Structure (Modern Nursery), seed germination and cutting plantations will grow under controlled climatic conditions and environment throughout the year. These are best suitable for ornamental flowers and aromatic plants with least efforts and lesser use of water and fertilizer. The capacity of these three nurseries is about 2 to 2.5 lac seedling/cutting at one time, and about 8 lac seed sowing/cutting planting annually. From these modern nursery facilities, the quality of in-house seedlings and cuttings will improve with regular supply.

#### 2.3.1.27 High Speed Broadband Service through Fibre to the Home

NDMC's Smart City Limited has signed an Memorandum of Understanding (MoU) with MTNL to provide very high speed broadband services on optical fibre (FTTH) in Connaught Place (CP) and Central Business District (CBD) area under Phase - I. A state-of-the-art public Wi-Fi services/network will be provided in CP/CBD area. The project will provide FTTH services to establishments and offices along-with state of art public Wi-Fi services in CP/CBD area. The revenue generated from these services shall be shared equally between NDMCSCL and MTNL. Rs.10.57 crore has been sanctioned for this Phase – I project by NDMC's SPV. The work for laying of optical fibre and Wi-Fi Switches has already started and the project will be rolled out in the year 2018-19. It is proposed to extend such system in other parts of NDMC area in the year 2018-19.

## 2.3.1.28 Global Tender for selection of consultant for streamlining Traffic and optimizing road network in NDMC area

2.3.1.28.1 Due to redevelopment in number of many colonies in NDMC, traffic related issues are to be addressed to meet increased traffic load in near future. Recently, major tail effects of traffic congestions in peak hours has been increased and felt on important roads. Therefore, it is necessary to study the capacity of the existing infrastructures / road network in NDMC area vis-à-vis traffic volumes and to protect the heritage value of the NDMC area. The safety and security of the pedestrians, women, DIVYANGS and cyclists is important to be addressed in the present scenario as well as in future.

2.3.1.28.2 Therefore, it is proposed to engage a traffic consultant for streamlining traffic and optimizing the road network in NDMC area through global tender to improve safe and reliable mobility in the NDMC area after considering all the possible mode of transport and smooth interlinking. The consultant will evaluate:

- (i) the existing mobility in NDMC area including all mode of transports.
- (ii) to improve the experience of the commuters safe and reliable.
- (iii) for seamless integrations of different mode of transport.
- (iv)for sustainable Infrastructure for safety and security of citizen specially women's, DIVYANG, children and cyclist.
- (v) for Dynamic Real Time Traffic Control / Management to mitigate congestion and to safe environment.
- (vi)for analysis of strength, weakness, threats, bottleneck and to improve road infrastructures in NDMC area and the future demand.

#### 2.3.1.29 Broadband over Power Lines as Pilot Project in NDMC area

- 2.3.1.29.1 NDMC is exploring the possibility of Broadband over Power Lines (BPL) in collaboration with Department of Telecommunications, Ministry of Communications, Government of India and IIT Hyderabad. NDMC will make available its electricity distribution network of one electric sub-station for the purpose of testing this technology in the year 2018-19 to provide very high speed broadband services through ParaMagnetic Communications a system that integrates all the existing communications / signaling paradigms into a singular infrastructure by utilizing existing established power distribution network, removing any or all needs for multiple parallel infrastructures. ParaMagnetic Communications gives a Unified Communication / Signaling Architecture with Multiple Feeding Capacity.
- 2.3.1.29.2 This technology allows relatively high-speed digital data transmission over the public electric power distribution wiring. BPL uses higher frequencies, a wider frequency range to provide high-rate communication over longer distances and send signals up to 200m or 650ft as compared with a typical Wi-Fi router, which offers only 35 metres or 115 feet. It offers data rates from 200Mbps (million bits per second) to over 1 Gbps (Gigabits per second), comparable with or better than a typical Wi-Fi router. It uses encryption to protect signals travelling around the home and is much more secure from eavesdropping than wireless networks. If the experiment succeeds, it will be a game changer technology for providing internet.

#### 2.3.1.30 Modular Rainwater Harvesting

For the purpose of conservation of rain water, Modular Type Rain Water Harvesting (**RWH**) Pits (Copolymer based, Crosswave rainwater harvesting technology) as advised by the Central Ground Water Board (**CGWB**) are installed by NDMC. There are 140 RWH pits exist in NDMC area. 98 Rain Water Harvesting Pits were taken up for construction in 2017-18 out of which 70 RWH pits are completed and remaining will be completed by March, 2018.

#### 3. RESOURCE CONSERVATION

#### 3.1 Intensifying the Green Cover

- 3.1.1 NDMC provides the lungs to the city of New Delhi with a green cover of about 50%. Taking forward its commitment to provide a pollution-free environment to residents and visitors, NDMC continue to improve its gardens such as Lodhi Garden, Nehru Park, Talkatora Garden, Sanjay Jheel Park, Children's Park, Singapore Embassy Park and Central Park, Connaught Place besides 51 Round-abouts, 110 Avenues with 1 lakh Avenue Trees, School Greens, Market Greens, more than 122 NDMC Colony Parks around 100 Road Side Greens and 26,000 other trees. In the past year, NDMC has developed small vertical gardens at 470 places.
- 3.1.2 NDMC has undertaken intensive plantation drives during the year 2016-17 and planted around 7.5 lakh saplings alongwith the stakeholders, which includes around 10% timber trees, 40% shrubs and 50% ground coverage. The drive continued in the year 2017-18 wherein almost 10 lakh saplings have been planted alongwith stakeholders. It is proposed to continue with intensive plantation drives in the year 2018-19. By re-inventing these spaces as green areas with plants of native species, it will enable our residents to engage in joyful social and physical activities. The objective of this adaptive and community-focused approach is to transform the neighbourhoods through greening activities.

#### 3.2 Ground Cover

Roads are the important part of the New Delhi area. All Avenue roads are having Avenue trees. Still some kutcha areas exist on both sides of roads which have potential for generating dust. To curb dust particles, it is proposed to cover all kutcha area on both sides and central verges with shrubs, greens and creepers, which will go a long way in mitigating air pollution. This will further increase oxygen level in New Delhi area. For optimum results, year around grown shrubs would be planted. I propose to cover all Avenue Roads in the year 2018-19 and have set aside a sum of Rs. 2.0 crore for this specific purpose.

### 3.3 Audit of Plantation undertaken by NDMC

For the plantation done in the year 2016-17, green survey audit was conducted through Indian Agriculture Research Institute, Delhi, which certified 72% survival rate of timber plants planted by NDMC. Green survey audit for the plantation for the year 2017-18 will be completed by March, 2018 by the Indian Agriculture Research Institute, Delhi. I propose to continue this audit in the year 2018-19.

#### 3.4 Census of trees on Avenue Roads

There is a necessity of having comprehensive information on the number, kind and health of trees on all avenue roads. Therefore, I am proposing trees census on all Avenue Roads in 2018-19 and digitize this data for better tree management. This will form baseline database for New Delhi green cover which will help in scientific management of these trees including need of replacement of old aged avenue trees. Proposed tree census will capture scientific and

popular names, girth at breast height, height, crown area, GPS location, etc. of such trees. A dedicated team will be constituted in NDMC to complete the task in 2018-19.

#### 3.5 Developing more green areas

- 3.5.1 After development of India-Africa Friendship Rose Garden at Shanti Path in the year 2015-16, and BRICS Rose Garden at Shanti Path in the year 2016-17, it was proposed to develop a new garden at Tuglaq Crescent in the year 2017-18. NDMC through consistent efforts got the land acquired from the L&DO, which has been developed as a world class park. This newly developed park will be inaugurated on 23<sup>rd</sup> January, 2018 as Bharat-ASEAN Maitri Park during the forthcoming ASEAN-India Commemorative Summit, 2018. It is proposed that in the year 2018-19, world class public parks will be developed at Baba Kharak Singh Marg and Yashwant Place, New Delhi.
- 3.5.2 NDMC has upgraded the Children Park situated at India Gate to increase the facilities and activities for children in the year 2017-18. NDMC has also developed five round-abouts, including two round-abouts at Janpath in the year 2017-18. NDMC will undertake beautification of park at Aurvindo Marg, New Delhi and two round-abouts situated on Janpath, one at crossing of Ashoka Road and other one at crossing of Akbar Road in the year 2018-19.
- 3.5.3 NDMC has taken over the green belt situated opposite to AIIMs from the PWD, which will be developed as a public recreational place with water bodies, fountains and ornamental LED lightings alongwith landscaping of the same in the year 2018-19. While the work on development on Vertical Gardens have been started, which has been widely appreciated, it is proposed to continue developing vertical gardens in the year 2018-19.

#### 3.6 Mechanization in Horticulture Department

The work of the Horticulture Department is labour-intensive. We hope to strengthen the hands of our staff by machines to traverse the parks with small equipment quickly. Three number of 15HP tractors, five electric vehicles, one Bobcat machine and several horticulture machines /tools have been purchased as a part of increasing mechanization of the Horticulture Department in the year 2017-18. In the year 2018-19, it is proposed to purchase two wood chippers machines, 2 mechanical shredders machines, two number Ride on Lawn Mower machines, two more Bobcat machine, three electric vehicles, six tractors, 15 stainless steel water trolleys and further horticulture machines /tools to further increase mechanization in the Horticulture Department.

#### 3.7 Organic Cafeteria in Rose Garden

It was proposed to open Organic Cafeteria(s) in Rose Gardens at Shanti Path to meet the public requirement under PPP model in the year 2017-18, construction of which has been completed, and licence of which will be awarded through open e-auction basis by March, 2018.

3.8 In the coming year, NDMC proposes to spend a sum of Rs.118.29 crore towards horticultural activities, out of which Rs.7.86 crore is for Capital works.

#### 4. SOCIAL INFRASTRUCTURE

#### 4.1 EDUCATION INITIATIVES

4.1.1 The last two years have been remarkable for the NDMC / Navyug schools that have started performing exceedingly well both quantitatively and qualitatively. All these have been possible because of various initiatives taken by the NDMC during the last two years. The improvement in the NDMC /Navyug Schools can be seen in the overall improvement in Class-10 and Class-12 result of the 2016-2017. The enrollment of each and every school and attendance of the students have been increasing which shows that we are on the right track. However, the goal is far ahead and we have to do a lot to be the best in Delhi.

## 4.1.2 Overall improvement in class 10<sup>th</sup> and 12<sup>th</sup> Results

There has been a marked growth in class 10<sup>th</sup> and 12<sup>th</sup> results in NDMC schools this year.

- In class 12<sup>th</sup>, the overall result of NDMC and Navyug schools in the year 2016-17 is 90.15% compared to 86.67% in the year 2015-16, and 80.20% in the year 2014-15.
- In class 10<sup>th</sup>, the overall result of NDMC and Navyug Schools in the year 2016-17 is 90.76% which has shown an impressive growth over 2014-15 and 2015-16 when the overall results were 91.25% and 83.30% respectively.
- 4.1.3 Apart from improvement in the overall results, there is substantial increase in quality of performance by NDMC/Navyug Class 12<sup>th</sup> students. Number of distinctions in different subjects have increased by almost 40%. Number of students scoring more than 90% in a subject has increased from 282 last year to 355 this year. At the same time, number of the students in the range of 75% to 90% has increased by more than 50%.

#### 4.1.4 Improvement in Enrollment in NDMC / Navyug Schools

The enrolment in all NDMC/Navyug Schools has shown an impressive growth during the academic year 2017-2018 over 2016-17. The overall enrollment in NDMC/Navyug Schools in 2016-2017 was around 27,500, which has increased to 30,019 in 2017-2018 with the introduction of digital education in our schools and I hope that the enrolment in NDMC / Navyug Schools is likely to further increase during the year 2018-2019 due to better infrastructure, digital education and improved quality of education.

- 4.1.5 In addition to the above, there have been many other important achievements during the year 2017-2018 in respect of our schools, such as:
  - a) Establishment of joyful library in 14 Primary schools
  - b) Introduction of sports academy in respect of 9 games at 14 NDMC/Navyug Schools/Stadiums
  - c) Modernization of all 18 crèches running in NDMC area
  - d) Sport meets of students with disabilities of NDMC / Navyug Schools alongwith other schools of Delhi. This will be done in the year 2018-19.

- e) Up-gradation of 13 Balwaris into state-of-the-art NDMC Playway School, and rest 5 Balwaris will be converted into NDMC Playway School in the year 2018-19.
- f) All necessary proformas for introduction of NDMC's Best School Running Trophies between Navyug/ NDMC Schools have been prepared in collaboration with the QCI, and the Trophies will be announced from the academic year 2018-19.
- 4.1.6 Now, I would like to propose the projects/initiatives that would be undertaken during 2018-2019 to further improve the standard and performance of our schools:

## 4.1.6.1 Up-gradation of N.P. Bengali Girls & N.P. Girls Schools, Gole Market into School of Excellence

Around 3000 girl students study at N.P. Bengali and N.P. Girls Schools, Gole Market, which is about 10% of the total students studying in NDMC and Navyug Schools. It is proposed to upgrade these two schools into a school of excellence having every component of smart and digital education systems like campus with all smart classes, Wi-Fi campus, digital library, automated school management information system, tablet based smart classes for faster and easier assessment of the students and facility for sharing of the teaching of the best teacher through video conferencing/web casting. To match the civil infrastructure with the smart and digital education, it is proposed to upgrade the existing infrastructure into truly world class by providing swimming pool, multipurpose play ground, A.C. Auditorium, Kitchen for Mid Day Meal, RO water ATM plant, joyful library for primary classes, modern nursery classes/play way classes with all modern facilities/amenities and all women campus. Accordingly, I propose that these two schools will be upgraded as a school of excellence in the year 2018-2019.

#### 4.1.6.2 Development of Lodhi Road Campus into a Schools of Excellence

- 4.1.6.2.1 There are 05 schools at Lodhi Road, namely, NP Sr. Sec. School, NP Primary School, NP Nursery School, Navyug Sr. Sec. School and Navyug Pr. School. Around 2500 students study in these 5 schools situated at a single plot. I propose to start re-development the Lodhi Road campus as world class Schools of Excellence in the year 2018-2019 to be completed by 2019-20, namely, Navyug Girls International School and NDMC Boys International School. The Schools of Excellence at Lodhi Road will have state-of-the-art building, with common infrastructure for sports facilities. Like the School of Excellence proposed at Gole Market campus, the Lodhi Road Schools of Excellence will have all modern digital educational infra-structure, world class sports infra-structure along with modern civil infrastructure. Once set up, it will cater to more than 3000 students.
- 4.1.6.2.2 As a respect to the martyrs of paramilitary forces of the Country, it is proposed that a 100 bedded girls hostel will be constructed and attached with Navyug Girls International School for daughters of paramilitary force personnel who sacrificed their lives for nation, wherein, cost of all facilities, including education, loading and boarding, will be borne by NDMC. Expenditure will be incurred from Smart City initiatives.

#### 4.1.6.3 Conducting a quality assessment of NDMC/Navyug schools by QCI

4.1.6.3.1 NDMC introduced a project in collaboration with the Quality Council of India (QCI) in 2017-18 for conducting a quality assessment of NDMC/Navyug schools to assess learning outcomes of the students and teachers from classes V to VIII to foster excellence in school education system. The project involves framing minimum grade wise learning goals, Evaluation and Monitoring of Learning outcomes of students, Assessment and analysis of Teaching Learning activities and Teaching Ability of teachers, Strategic assistance to teachers by developing action plan to bridge the gaps and to cater to their pedagogical needs, Impact analysis of teaching effectiveness in various subjects and Development of dynamic dashboard to monitor teachers' performance and student performance which shall be web based system. So far, QCI has completed the first round of assessment of students and teachers and have developed a dynamic dashboard to monitor the teachers' and students' performance. Under the project, QCI is assessing and monitoring student learning outcomes of NDMC schools through intervention in the teaching-learning process contributing in the betterment of beneficiaries. To ameliorate the teaching learning process, QCI is actively functioning in 43 schools of NDMC. Till date 7630 students (based on knowledge, understanding and application level thinking skills) and 428 teachers are assessed on relevant domains.

4.1.6.3.2 The result of the assessment has been shared with the parents and teachers. This project is an unique project in any government set up. Keeping in view the benefit of the project on enhancing the quality of education, it is proposed that the project will be extended to cover the students of classes IX and X and teachers teaching these classes in 2018-2019.

#### 4.1.6.4 Atal Tinkering Labs

With a vision to 'Cultivate one Million children in India as Neoteric Innovators', NITI AAYOG under Atal Innovation Mission is establishing Atal Tinkering Laboratories (ATLs) in schools across India. The objective of this scheme is to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc. ATL is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode; and learn innovation skills. I am pleased to inform that Navyug School, Sarojini Nagar has been selected as one of the schools by NITI AAYOG for establishing Atal Tinkering Labs. To support and implement the objectives of the Atal Tinkering Labs, it is proposed to set up Tinkering Labs on the lines of ATL initially in five NDMC/Navyug schools through our own resources where science stream is taught in the year 2018-19.

#### 4.1.6.5 Local Excursion

Last year around 1000 students of NDMC / Navyug schools were sent on a heritage walk to give them an exposure to our heritage buildings located in Delhi to enrich their knowledge about our rich cultural history. The programme was very successful and the parents and the students were very encouraged with this heritage walk. I, therefore, propose to make the heritage walk an annual affair and please to announce that each year 100 selected and meritorious students of each NDMC / Navyug Schools will be given an opportunity to go on a heritage walk in Delhi or nearby cities.

#### 4.1.6.6 Setting up of teachers resource centre

To improve the quality of education and academic environment of our schools, regular inservice training to teachers is a pre-requisite. In recent past, we have undertaken several initiatives for in-service training of our teachers. There is, however, an immediate need to have a dedicated training centre for imparting training to our teachers to improve their teaching skills and pedagogy. I, therefore, propose to set up a dedicated teachers resource centre at NDMC Science & Humanities Centre, Tughlaq Crescent Road, New Delhi in the year 2018-19. The proposed centre will have all modern infrastructures including modern conference hall with modular furniture, dedicated library and all infrastructures for training of digital education alongwith subject enrichment training.

#### **4.1.6.7** Fellowship for Trainee Teachers

Around 200 trainee teachers undergoing various courses like B.Ed., JBT, ETE, NTT, B.El.Ed. in Delhi University Colleges and DIET, come for class room teaching training/practice every year in our NDMC/Navyug Schools. Their association with NDMC/Navyug Schools helps in improving the academic environment being young and energetic having knowledge of modern teaching practices and pedagogy. To attract young and talented trainee teachers, I propose to introduce a fellowship scheme to 10 best trainee teachers as a recognition of their contribution to improve the quality of education in our schools from the year 2018-19. Under the scheme they will be given the certificate of excellence and cash prize of Rs. 5,000/- to each 10 selected best trainees.

#### 4.1.6.8 Training of Teachers in the year 2017-18

NDMC organized nine workshop for capacity building, which was attended by the school principals, HM of primary wings/schools and senior Assistant Teachers. Subject enrichment workshops, for PGTs and TGTs, on various subjects were conducted in the year 2017 - 2018. Orientation programme was conducted for the newly promoted TGTs and PGTs. Four day training was conducted for the Assistant Teachers including the Assistant Teacher (Urdu), who were selected through DSSSB. A three days training was provided to the Librarians and Lab Assistants. A four days training for HMs of NDMC and Navyug schools was conducted at NDMC schools of Science and Humanities in January 2018.

#### 4.1.6.9 Under 10 Girls Football Team

In order to inculcate the sports culture among students and particularly among girl students of NDMC and Navyug Schools, it is proposed to form Under 10 Girls Football Teams at three (03) locations, one each at Navyug School, Sarojini Nagar, NP Co-Ed Sr. Sec. School, Lodhi Road and NP Bengali Girls Sr. Sec. School, Gole Market, where Football fields are available. The girls will be provided free coaching, free nutritious diet and free kits for skill training, physical training and match practices. Under the programme, initially, 30 girls at each school will be selected for grooming as future football players under the supervision of experienced coaches, which will be hired through agencies such as Delhi Soccer Association.

#### 4.1.6.10 Up-gradation of sport infrastructure in schools

Sports play an important role in all round development of the child. During the year 2017-2018, NDMC proposed to setup 10 multi-purpose playing fields, out of which work of 6 has been completed and rest 4 will be completed in the current financial year. I propose to upgrade the existing sport infrastructure available in 5 more schools on the same line in the year 2018-2019.

### 4.1.6.11 Introduction of Language Lab in Navyug School, Sarojini Nagar

Language has its own importance in school curriculum and a basic component of school syllabus. If the language of the child is improved, his learning outcome will definitely improve. I, therefore, propose to introduce two language labs, one in Navyug School, Sarojini Nagar and other one at NP Bengali Girls School, Gole Market on a pilot basis to improve the language skills in Hindi, English, Sanskrit and Urdu/Punjabi.

#### 4.1.6.12 Introduction of Smart Education in Primary Classes

Smart Classrooms have been set up in 30 NDMC and Navyug schools in all Hindi/ English medium sections of classes VI to XII in the year 2016-17. Smart classrooms has transformed traditional classrooms into futuristic technology enabled smart learn classes by amalgamating state-of-art technology, infrastructure and professionally developed learning content. The subject curriculum is now being made available digitally to facilitate teaching. Such classrooms are being provided with high-end computers, advanced interactive display system based on high end projectors. There has been positive impact of these smart classes on school attendance, admission, result, academic environment, quality of teaching, school infrastructure, school safety and school administration. In a survey conducted by the NDMC regarding introduction of smart classes in Primary wing, the parents of primary classes have replied in support of introduction of smart classes in Primary wing. On various parameters, out of 8573 number of feedbacks received, more than 96% of parents think that smart classes may be introduced in primary sections of NDMC / Navyug schools. On the basis of the feedback received from different stakeholders i.e. students, teachers, and administrators and parents, it is proposed to introduce Smart Classes in the primary sections of NDMC/Navyug Schools in the year 2018-19.

## 4.1.6.13 Introduction of School Automation Management/ Automation System (MIS)

proposed in the Budget 2017-18 to introduce School Automation Management/Automation System (MIS) in all NDMC and Navyug Schools to provide various school related services to school administration, students and Parents based on automated School Management Systems in the year 2017-18. The School Management Information System (MIS) includes School Profile Management, Students Profile Management, Employee Information, Student Attendance, Leave Management, Report Cards, Curriculum Tracking Custom, SMS Alert for Parents/Administrators on student & teacher attendance. The outcome and expected deliveries through Implementation of School MIS are Low dependence on paper work, Increase in productivity of processes and personnel and increase in control on overall aspects of school management. Necessary work for

finalization of technical details for the same has been completed. It is expected that such MIS will be stabilized in the year 2018-19 in all NDMC / Navyug Schools.

#### 4.1.6.14 Digital Library

Thirteen Digital Libraries have been setup by renovating the libraries of the NDMC/Navyug schools in the year 2017-18. These Digital Libraries have been provided with up-to-date civil and electric infrastructure, latest furniture alongwith All-in-One Computers, Amazon Kindles, bar-code printers, bar-code scanners, 8 Mbps broadband connection and NIC elibrary software. These 13 libraries are fully functional and being used by students and teachers regularly and having a positive impact on the reading habit of the students. It is proposed to setup digital libraries in remaining 12 NDMC and Navyug Secondary/Senior Secondary Schools during the year 2018-19.

#### **4.1.6.15 3D Printing Lab**

Realizing the need to create scientific temper and cultivate the spirit of curiosity and innovation among young minds, it was proposed to support establishment of a network of 3D Design Technology and 3D Printing Labs in Ten (10) NDMC and Navyug Schools in 2017-2018 budget. 3D Design Technology Laboratory is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode and learn innovation skills with the help of 3D Printing. I am pleased to announce that the project is likely to be started in the year 2017-18 in 10 NDMC/Navyug schools in first phase and will be completed in first quarter of the year 2018-19.

#### 4.1.6.16 Introduction of Tablet based Smart Classes

Tablet based smart classes is the latest development in the field of Digital education especially for assessment purposes. Under the Tablet based smart classes assessment of students will be faster and easier and hence, will be helpful in improving the learning outcome of the students. In collaboration with Microsoft and Samsung tablets have been provided in the year 2017-18 as a pilot project in three classrooms of two schools, namely, N. P. Bengali Girls Senior Secondary School, Gole Market and NP Girls Sr. Secondary School, Gole Market, experience of which is very fruitful. Further, a tablet based Wi-Fi enabled classroom is being developed in all the Navyug / NDMC schools to undertake online assessment / evaluation of the students, and the work will be completed by March, 2018. A Technical committee has been constituted for finalization of Technical specifications for the project. It is proposed to introduce the Tablets in all sections of IX class of NDMC and Navyug Schools in the year 2018-19.

#### 4.1.6.17 Exchange Programme

In the year 2017-18, first time in the history of NDMC, 6 students and 4 teachers of 10 Navyug / NDMC Schools were sent on foreign visit to the Belgium from 26<sup>th</sup> May to 04<sup>th</sup> June, 2017, and both teachers and students were found highly motivated after the foreign exposure. To provide an opportunity to NDMC and Navyug School students an exposure to the other parts of country to promote the spirit of national unity and integrity amongst the students, I propose to introduce an exchange programme initially with the North Eastern

States in 2018-2019. Under the exchange programme NDMC will tie up with the Government of Sikkim for an exchange programme, and selected students of NDMC and Navyug schools will go to Sikkim to visit schools and the state and some selected students will come from Government of Sikkim schools to visit NDMC schools and the capital in the year 2018-2019.

#### 4.1.6.18 Installation of CCTV Camera in all the NDMC and Navyug Schools

In order to improve the security of our students and schools, it is proposed to install CCTV cameras in all schools at strategic locations in the year 2018-19. This will help in improving the academic environment of the school.

#### 4.1.6.19 Smart Cards to all students of the NDMC and Navyug Schools

In an endeavour to make our schools smart, we are going to introduce RFID/other technology based Smart Identity Cards for all students of NDMC and Navyug schools in the year 2018-19, and such cards will contain information pertaining to a student, like the reports related to health, bio-data etc.

#### 4.1.6.20 Regular annual Grant for teaching learning, library and sports material

I am proposing to introduce regular annual grant to all NDMC and Navyug Schools of Rs.10,000 and Rs.20,000 based upon students enrollment of upto 1000 students in the school or more than 1000 students in the school respectively, separately for the purpose of purchasing teaching learning, library and sports material.

## 4.1.6.21 Up-gradation and modernization of Laboratories in NDMC and Navyug Schools

It is proposed to upgrade and modernize 56 laboratories during the year 2018-19. This consists of up-gradation and modernization of 20 science labs for Secondary classes, 33 subject Science labs (Physics, Chemistry, Biology) for Senior Secondary Classes, and 3 Home Science labs.

#### 4.1.6.22 Up-gradation and modernization of Public Libraries

One Public Library at Laxmi Bai Nagar has been upgraded and modernized during the year 2017-18. It is proposed that remaining 8 Public Libraries, including WTI Institutional Library, will be upgraded and modernized during the year 2018-19.

#### 4.1.6.23 Sanitary Napkin Vending Machines

To increase level of hygiene in girl students, Sanitary Napkin Vending Machines will be installed in the year 2018-19 in all Secondary and Senior Secondary Navyug / NDMC schools in collaboration with HLL Lifecare Limited to dispense free sanitary napkins to girl students.

#### 4.1.6.24 Aanchal School for students with Special needs

This NDMC School provides academic education as well as vocational training (such as paper craft, wood work, spiral binding and candle making) to the children with disabilities. In

the year 2017-18, a new nursery section was added to the school. Exposure training was granted to a group of 30 students in Jaipur for teaching them independent living and exposure away from the protective families..The vocational products of the students were displayed and sold through participation in melas organized such as blind relief association, British School, etc. I propose to upgrade the infrastructure of the Aanchal School, and to add one junior section during the year 2018-19. Further, it is proposed that regular training programme for the Special Educations will be organized in co-operation with National Institute of Medically Handicapped (NIMH) and Intervention Research Centres (IRC), and interaction programme will be organized with students of regular schools. It is proposed to signing a Memorandum of Understanding (MOU) with the Lady Irwin College to tie up with Aanchal School for regular practical work of B.Spl.Ed. students. Further, it is proposed to have a Smart Classroom with facility of Computer lab for smart teaching of students in Aanchal School in the year 2018-19.

#### 4.1.6.25 Mobile Class rooms for construction workers children

- 4.1.6.25.1 Under the re-development plan of Nauroji Nagar, Netaji Nagar and Sarojini Nagar, there will be huge construction work in coming days resulting into concentration of large number of construction workers in these areas. To cater the educational need of their children, I propose to set up one Mobile Classroom in 2018-2019 to ensure that no child of labourers involved in construction is left without minimum basic education. The proposed mobile van classroom will be all weatherproof with minimum medical facility, library as well.
- 4.1.6.25.2 It has been my effort to increase the spending on education sector in NDMC progressively. In 2017-18 the Budget Estimates were Rs. 207.30 crore of which Rs. 193.63 crore was Revenue Expenditure and Rs. 13.67 crore was Capital Expenditure. The revised estimates of 2017-18 are Rs. 193.79 crore for revenue expenditure and Rs. 14.23 towards capital expenditure; in sum this amounts to Rs. 208.02 crore. For 2018-19, I proposed to spend Rs.211.25 crore of which Rs. 197.55 crore will be revenue expenditure and capital expenditure will be Rs. 13.70 crore. Expenditure will also be incurred for the Education Sector through Smart City initiatives.

#### 4.2 SKILL DEVELOPMENT

- 4.2.1 NDMC has setup state-of-the-art Pradhan Mantri Kaushal Kendra at Mandir Marg and Special Pradhan Mantri Kaushal Vikas Yojana Kendra at Dharam Marg, which were inaugurated by Hon'ble Union Minister of Home Affairs and Hon'ble Union Minister of Skill Development & Entrepreneurship on 23<sup>rd</sup> October, 2017.
- 4.2.2 Pradhan Mantri Kaushal Kendra at Mandir Marg, New Delhi offers:
  - (i) General Duty Assistant Course (duration 460 hours)
  - (ii) Home Health Aid Course (duration 400 hours)
  - (iii) Vision Technician Course (duration 465 hours)
  - (iv) Emergency Medical Technician Course (duration 400 hours)
  - (v) Diabetic Educator Course (duration 400 hours)

- (vi) Pharmacy Assistant Course (duration 465 hours)
- (vii) Solar PV Installer [Suryamitra] Course (duration 340 hours)
- (viii) Solar PV Installer Electrical Course (duration 240 hours)
- 4.2.3 As on date 1,560 students have been enrolled in the Pradhan Mantri Kaushal Kendra at Mandir Marg and the annual target is 3200. 600 students have been assessed and result of 180 students has been declared, out of which 170 have passed. Out of 170 students who passed out, 100 got placement through campus interview.
- 4.2.4 Special Pradhan Mantri Kaushal Vikas Yojana Kendra at Dharam Marg offers the Dental Assistant Course (duration 700 hours). Presently, 120 students are enrolled in the Special Pradhan Mantri Kaushal Vikas Yojana Kendra at Dharam Marg in two Dental Assistant Course and the annual target is 720. Assessment of first batch will be undertaken in February 2018. As this course is popular, we are proposing to add one more batch there.

#### 4.2.5 Enhancing Skills of Field Officials

- 4.2.5.1 Through Recognition of Prior Learning (**RPL**), employees of NDMC are being imparted training and knowledge for the purpose of increasing their competencies against standard parameters in the following jobs:
  - (i) Gardener NSQF Level 4
  - (ii) Mason General NSQF Level 4
  - (iii) Mason Tilling NSQF Level 3
  - (iv) Assistant Pavement Layer NSOF Level 2
  - (v) Assistant Electrician NSQF Level 3
  - (vi) Safai Sevaks NSQF Level 3
  - (vii) Unarmed Security Guard Level 4
- 4.2.5.2 RPL programme was started from March, 2017 and as of now total 1,048 employees have been trained. It is proposed to impart training to 2,500 NDMC's employees, mainly, gardener, mason, beldars, safai-sevaks, etc. in the year 2018-19 to improve their skill set.

#### 4.2.6 World Class Skill Development Centre for Green Jobs

- 4.2.6.1 For the proposed development of World Class Skill Development Centre at Moti Bagh, New Delhi in the year 2017-18, equipped with laboratory having simulated environment for all job roles of green sectors, land measuring 2866 sq. m. has been acquired by NDMC.
- 4.2.6.2 A memorandum of understanding is proposed to be signed with National Thermal Power Corporation (NTPC) to share cost of the project for construction of a five storey building (built up area 5000 sq. m. approx.) in a plot measuring 2866 sq. m. Since NTPC being a pioneer in energy sector, NDMC in collaboration with NTPC, would cater to the requirements of green sector professionals from PAN India.

4.2.6.3 Design and drawings of the proposed Centre has been finalized and statutory clearances obtained. The construction of project, estimated to cost Rs.23.00 crore with a basement and five storey building for an energy efficient World Class Skill Development Centre will be started in 1<sup>st</sup> quarter of the year 2018-19 and the work will be completed in the year 2019-2020.

#### 4.3 MEDICAL SERVICES

#### 4.3.1 Modernization and Strengthening of Charak Palika Hospital

4.3.1.1 I am glad to inform the Council that due to continuous efforts and improvement in services rendered at Charak Palika Hospital (**CPH**), the OPD attendance has touched a new peak of 5,49,220 patients in the year 2017 as compared to 4,86,481 patients in the year 2016 and 3,94,115 patients in the year 2015, showing an increase of almost 40% in a span of two years. I hope that with introduction of new facilities at CPH and further improvement in the existing services, the OPD figure will further increase in the year 2018. Number of patients seeking lab facilities have gone up significantly.

#### 4.3.1.2 e-Hospital Project

- 4.3.1.2.1 With introduction of e-Hospital in NDMC, the expenditure on medicines at CPH has reduced considerably despite foot fall of the patients touching new peaks. In the year 2016-17, medicine worth of Rs.4.78 crore were procured against procurement of medicines of Rs.6.70 crore in the year 2015-16. So far medicines worth Rs. 4.31 crore has been procured upto December, 2017 in the year 2017-18.
- 4.3.1.2.2 The e-Hospital project implemented in NDMC through NIC is one of its first kind in the country to have a secondary level hospital having e-Hospital software. It is a model which may be replicated in the other parts of the country.
- 4.3.1.3 Construction of 16 flats for resident doctors at Charak Palika Hospital has been completed in a record time of one year in 2017-18 at a cost of Rs. 1.79 crore. This will go a long way in improving services at CPH.
- 4.3.1.4 Work of Additional Block at Charak Palika Hospital at a cost of Rs.10.84 crore is going on at fast pace and is likely to be completed by March, 2018, which will further improve the standards of the Charak Palika Hospital by enabling two state-of-the-art operation theaters with modular interiors and latest equipments, post operation recovery unit and ICU unit. With the completion of construction of additional block, the Charak Palika Hospital will be upgraded to 200 bedded hospital from 158 bedded hospital.

#### 4.3.1.5 Queue Management System

Same as Banks/ corporate hospitals. Multiple LED display at various locations showing information regarding queue status and interactive display of IEC aimed at behavioral change

and health education for the public would be set-up in Charak Palika Hospital in the year 2018-19.

#### **4.3.1.6** Modernization of Casualty

Casualty at Charak Palika Hospital will be equipped with following items in 2018-19:

- (i) Pulse Oximeter (1-1.5k/unit) (atleast 10 one for each ward)
- (ii) Infusion pumps (17-25k/unit) (8-10)
- (iii) Video laryngoscope (1.2L/unit; atleast two 1 for OT and 1 for Casualty)
- (iv) Vein Viewer (5.92L/unit; one for Casualty)
- 4.3.1.7 It is proposed to establish a state-of-the-art Video Conferencing Center at Charak Palika Hospital with facility of Telemedicine in the year 2018-19.

#### 4.3.1.8 Advanced Laparoscopic Set

At Charak Palika Hospital, all type of major surgeries are being done. For further improvement of surgical operations at Charak Palika Hospital, an advanced laparoscopic set will be provided at the cost of around Rs.1.5 crore in the year 2018-19. With this type of minimal access surgeries (key hole surgeries) done, anywhere in the country would be possible at Charak Palika Hospital. This will also reduce the hospital stay of patients and thus reduce waiting time of patients and also increasing the number of surgeries at the hospital.

#### 4.3.1.9 Digital Radiography System

Latest digital x-ray machine will be installed at Charak Palika Hospital. The digital x-ray will provide better quality of x-ray films and less x-ray exposure to the patients. It is proposed to install Digital X-ray Machine at CPH in the year 2018-19.

## 4.3.1.10 Setting up of Pulmonary Function Test Laboratory at Charak Palika Hospital

Pulmonary Function Test (PFT) is a tool for assessment of lung function in patients with smoking, air pollution related lung diseases, bronchial asthma, etc. It will also help in assessment of lung function in pre-operative patients. It is proposed to set up a PFT Test Laboratory in the year 2018-19 at CPH.

4.3.1.11 It was proposed in the Budget 2017-18 to start a CT/MRI centre under PPP model at Charak Palika Hospital. I am glad to announce that a concessionaire has been identified through open e-tendering process under PPP model, wherein the offered rates by the concessionaire for CT and MRI are better than CGHS rates. The work for setting up of CT/MRI centre is likely to started before March, 2018, and will be completed in the year 2018-19.

#### 4.3.1.12 Hemodialysis Unit in CPH

It was proposed to establish a Maintenance Hemodialysis Unit at Charak Palika Hospital, however, the same could not be realized due to work space constraints at Charak Palika

Hospital, and therefore it is proposed that the same will be undertaken after completion of the Additional Block at Charak Palika Hospital during the year 2018-19.

4.3.1.13 Charak Palika Hospital Phase II proposed in the year 2017-18 has been considered, and it has been decided that the existing and proposed facilities at Charak Palika Hospital be optimized with the construction of Additional Block and Hostel Block and thereafter specialty Charak Palika Hospital Phase II may be considered.

#### 4.3.2 Strengthening and set up of AYUSH

Like year 2016-17, one polyclinic of AYUSH having Ayurvedic, Homoeopathic, Unani, Siddha, Yoga and Naturopathy Centres with Panchkarma Centres at Dharam Marg have started functioning in the year 2017-18. Infrastructure for full-fledged Holistic Wellness Centre at Khairati Clinic has been completed and this will start before March, 2018.

#### 4.3.3 NABH accreditations for NDMC Health Units

NDMC has taken initiative in the direction of its mission of providing quality health care facilities of international standards to its citizens and visitors in its area by getting NABH accreditation done through Quality Council of India for all its health care units. NABH accreditation has been awarded by QCI to 11 allopathic dispensaries and 5 MCW Centers. QCI standard are being implemented at Palika Maternity Hospital and monitoring of the activities though various indicators have started, which are likely to be completed by March, 2018. I propose to have the assessment of Charak Palika Hospital, AYUSH and Panchkarma clinics, and the Dental Clinic at Dharam Marg for NABH accreditation in the year 2018-19.

#### 4.3.4 Reaching residents through Mobiles

For more active participation of general public in better delivery of public health care, it is proposed that NDMC 311 App will be expended in the year 2018-19 to provide:

- (i) Mosquito Button: In a single click, geological location of mosquito breeding site/stagnant water will be sent through App to the concerned official.
- (ii) Stray Dog Alert Button
- (iii) Monkey Menace Button, etc.

#### 4.3.5 Expenditure on medical facilities availed by employees at empanelled hospital

Expenditure on medical facilities availed by NDMC employees at empanelled hospital in the year 2017-18 would be slightly less than the amount spent by NDMC in the year 2016-17. Expenditure occurred on medical facilities availed by NDMC employees and retired employees at empanelled hospitals was Rs.72.51 crore in the year 2016-17, and Rs.51.63 crore in the year 2017-18 upto December, 2017. I am proposing to have the claims of empanelled hospitals scrutinized through third party administrator not only for billing amount but also for the line of treatment rendered by these hospitals in the year 2018-19.

#### 4.3.6 Investment on Capacity Building

Both medical and paramedical staff will be deputed in the year 2018-19 for refresher course, training at higher center, including Foundation Training Programme (FTP) by Central Health Services (CHS), specially to newly recruited Medical Officers.

## **4.3.7** Opening of Amrit Pharmacy for Affordable Medicine and Reliable Implants to Patients

It is proposed that a Memorandum of Understanding (MoU) will be signed between NDMC and HLL Lifecare Limited in the year 2018-19 for opening of Amrit Pharmacy at Charak Palika Hospital. All the costly medicines and implants will be provided to general patients at very affordable prices. This will provide anti-cancer medicine at reasonable rates.

#### 4.4 PUBLIC HEALTH

#### 4.4.1 Swachh Survekshan

- 4.4.1.1 NDMC has been ranked at 7<sup>th</sup> Position in Swachh Survekshan, 2017 out of 434 cities and was adjudged the cleanest city in North Zone under category of population less than 10 Lakh. NDMC was declared "Open Defecation Free" in 2016. I feel proud to inform the Council that we have maintained this status for the third year running including in December 2017.
- 4.4.1.2 Under the Swachh Bharat Mission, two Brand Ambassadors Mrs. Deepa Malik & Miss Arunima Shinha were appointed last year for promoting NDMC's message on activities related to cleanliness / Swachhta Abhiyan. Special Sanitation Drives were regularly conducted by NDMC were lead by the Brand Ambassadors of the NDMC, Office bearer RWAs/ MTAs/ JJ Clusters IEC Activities such as exhibitions and school rallies. In the year 2017-18, activities like 86 Health talks, 150 Nukkad nataks, 31645 distribution of pamphlets on DOs and DONTs of Sanitation, Water Borne diseases, Vector Borne diseases, Hand washing techniques etc. are being carried out every month to create awareness among the citizens/visitors of NDMC area.
- 4.4.1.3 NDMC has taken many initiatives for better preparation for Swachh Survekshan 2018. NDMC engaged QCI Consultants for carrying out gap analysis regarding Swachh Survekshan 2018 parameters in NDMC Area and preparation of documentations for the Swachh Survekshan. Lot of IEC Activities in form of 50 school Rallies, 50000 Pledges have been signed, workshops and exhibitions have been carried out with RWA/ MTA/ JJ Clusters to highlight NDMC achievements and address their grievances. It is proposed to carry on these activities throughout the year 2018-19.

#### 4.4.2 Segregation of Municipal Solid Waste

4.4.2.1 In NDMC, door to door collection in residential, commercial and institutional area has been commenced. To strengthen the segregation of municipal solid waste (**MSW**) at household level, NDMC has distributed about 32,500 Blue and Green dustbins to our residents. NDMC has been able to institute segregation of waste in wet and dry components in eight of its colonies.

- 4.4.2.2 This year more residential colonies are included in the segregation of the waste at the household level. The process for converting these colonies to zero waste has been initiated. There is 100% waste segregation in few residential colonies in two components wet and dry waste from where the dry waste is sold to kabadiwalas and the earning is the livelihood of waste collector. The same concept has been institutionalized in schools by installing twin bins in school. In five colonies, namely Jor Bagh, DI & DII Flats Vinay Marg, Pandara Road, Rabinder Nagar and Bapa Nagar, segregation of waste is being carried out to make them ZERO Waste areas.
- 4.4.2.3 NDMC is planning to procure four Organic Waste Convertor of 2 MT capacity to be placed at identified locations of these residential colonies in NDMC area where the segregation of waste has already been started by the residents. These four organic waste convertors will be commissioned in the first quarter of the year 2018-19. In addition, six more organic waste convertor of appropriate capacity will be installed during the year 2018-19 in other colonies, who are undertaking segregation of MSW in their colonies.
- 4.4.2.4 Bio-methanation plant 500 kg/day capacity has been installed at the multipurpose in Laxmi Bai Nagar for generating Bio gas for the kitchen of the Indira Niketan working girls hostel.

#### 4.4.3 Scientific disposal of e-Waste

In order to safeguard its citizenry from hazardous waste, NDMC has provided 2 locations for disposal of e-waste. We also have a free on-call facility at Lodhi Colony and at Kautilya Marg where citizens can request pick up of e-waste. This year we propose to place e-waste bins at least ten locations in NDMC schools.

#### 4.4.4 Scientific disposal of recyclable waste through Reverse Vending Machine

10 Reverse Vending Machines have been installed at various locations in NDMC area for bar-coded plastic bottles. This machine is the latest innovative technology to bring about behavioral change in citizens. NDMC is planning to install 10 more reverse vending machine in commercial areas in NDMC.

### 4.4.5 Mechanical Road Sweepers

In the year 2018-19, in order to strengthen the road sanitation activities, I propose to procure 5 mechanical road sweepers at a cost of Rs. 3 crore. In addition, it is proposed to provide comprehensive operation and maintenance for existing five mechanical road sweepers for a period of three years, so that they may be used in atleast two shifts in a day. This will go a long way in curbing air pollution.

#### 4.4.6 Litterbins

800 Nos. stainless steel litterbins have been provided at public place, commercial market and roads during the year 2017-18. Work has started for providing additional 1500 twin stainless steel bins for dry waste and wet waste, which will be completed in the year 2018 - 19.

#### 4.4.7 Underground Bins

I am proposing to install about 20 underground bins at various locations in commercial areas which will cost about Rs.1.6 crore. Five static compactors will be procured and installed for better collection of MSW at a cost of Rs.2 crore in the year 2018-19.

#### 4.4.8 Litter Picker Machines and Wheelbarrows

For mechanization of picking litter from green belt along the road side, I am proposing to procure four more vehicle mounted litter picker machines in the year 2018-19 at a cost of around Rs.1.0 crore. In 2018-19, we aim to procure 970 wheelbarrows for safai sevaks at a cost of Rs. 80 lac.

#### 4.4.9 Empowerment of Officials

Last year, I empowered all CMOs, DSOs, CSIs, SIs and ASIs to issue spot fine of Rs. 50/against offenders, who creates insanitary conditions/litter in NDMC area. NDMC has started issuing spot m-Challans for maintaining the area around shops and stalls in un-hygienic condition, littering, open urination, etc. through NDMC 311 Mobile App. In the calendar year 2017, total 9085 challans were issued for various violations. In the year 2018-19, I propose to provide mobile point-of-sales (m-POS) machines to all inspectors and supervisory staff of Sanitation Unit for issuing m-challans at the spot to reduce cash transactions.

#### 4.4.10 User Charges

The Public Health Department has collected User Charges amounting to approx. Rs.3.2 crore.

#### 4.4.11 Roll Call Centres

NDMC has converted the existing masonry dustbins into the Roll Call Centers for Safai Sevaks and Public Toilet Utilities. These Roll Call Centers are for safai sevaks with gender specific toilet facilities along with water dispenser. Total 33 Roll Call Centres has been constructed and commissioned, and work is in progress in further 16 Roll Call Centres, which will be completed in the year 2018-19.

#### 4.4.12 Medical Health check-up of Safai Sevaks

In the year 2017, 901 safai sevaks over 40 years were investigated for diabetes, hypertension, thyroid, cardiac, lung pathology, kidney pathology and liver pathology. In addition, routine eye checkup and physical examination have been done for 373 safai sevaks. I propose to continue with the annual medical checkup programme of safai sevaks. In the years 2015 and 2016, 1274 and 1040 safai sevaks over the age of 40 years were examined medically, which helped in taking preventive health care measures.

#### 4.4.13 Recognition of Prior Learning

A total of 331 Safai sevaks completed the Recognition of Prior Learning course and received certificates for the same. This skill training of safai sevaks was organized by NDMC in collaboration with National Skill Development Corporation of India, which would be continued in the year 2018-19.

#### **4.4.14 Composting Pits**

- 90 Composting Pits at 33 locations were constructed in the year 2017-18 for converting horticulture waste to compost. Construction of another 20 more composting pits have been planned in the year 2018-19.
- 4.4.15 In the year 2018-19, I have allocated a sum of Rs.148.39 crore to the Medical Services and Public Health sector. Of this amount, Rs.13.16 crore would be spent towards capital expenditure and Rs. 135.23 towards revenue expenditure.

#### 5. PHYSICAL INFRASTRUCTURE

#### 5.1 POWER DISTRIBUTION

- 5.1.1 NDMC is the deemed licensee for distribution of Electricity in its area and is responsible for distribution of electricity to all consumers coming under its jurisdiction including all government buildings. It is fulfilling the responsibility of providing and maintaining reliable and quality supply of electricity round the clock to all its consumers.
- 5.1.2 Distribution is the most critical segment of the electricity business chain. Availability of a robust sub-transmission and distribution network along with Advance Metering Infrastructure, IT & SCADA (Smart Grid) is the need of the day for efficient management of the distribution system. There is a consistent increase in electricity demand due to changes in life style and consumption pattern which requires continual upgradation and creation of infrastructure for electricity distribution.

#### 5.1.3 Smart Grid

- 5.1.3.1 Under the Integrated Power Development Scheme (IPDS) launched by Government of India, Union Ministry of Power has approved NDMC's DPR cost of Rs.196.92 crore for the strengthening of sub-transmission & distribution system & sanctioned a grant of Rs.119 crore for the IPDS project work.
- 5.1.3.2 Under the IPDS Project, work of "Appointment of Project Design & Management Agency" (PDMA) for implementation of Smart Grid Infrastructure awarded to M/s WAPCOS Limited (in consortium with a French Company M/s EDF). Survey and site inspection of 223 electric sub-stations included in the IPDS project work is completed. The actions taken so far in the year 2017-18 and contemplated in the year 2018-19 in this regard are as under:
- (i) Tenders for the work of system strengthening of sub-transmission & distribution networks under IPDS have been finalized and work proposed to be awarded to the concessionaire is at a total cost of Rs.180 crore. Major part of the work shall be executed in the year 2018-19, and the rest will be completed in the year 2019-20.

- (ii) Tenders for the work of replacement of old HT & LT feeders have been called & work is being awarded to L-I bidder. Execution of work shall be undertaken in the year 2018-19.
- (iii) The work of AMI, IT enablement of distribution system and SCADA has been assigned to EESL (Energy Efficiency Services Ltd.), a Joint Venture of Public Sector Undertakings under Ministry of Power and an Memorandum of Understanding is being finalized. In this Scheme, existing meters are to be replaced with "Smart Meters". EESL floated a tender for 50 Lakh AMI meters and system integration and has discovered a rate of Rs.70 per meter per month. This will work out to be Rs.50 Cr. for total AMI implementation for NDMC in 10 years, which is much lower as compared to that earlier envisaged through EPC mode of approximate Rs.170 Cr. mainly because of utilizing the economy of scale.
- 5.1.3.3 AMI implementation would facilitate to fetch the readings instantly and bills for consumption of previous month would be issued immediately at end of the month without any time lag. This would result in improved billing and collection efficiency. Further, being smart meters, these meters would eliminate the chances of tampering as these meters would immediately flash such instances. The disconnection of electric connections can be easily done automatically from Control Room without actually visiting the site. AMI would be implemented immediately with deployment of Smart Meters and over loading cases would be appropriately dealt with thereby increasing revenue. The detailed historical metering details would be available from these meters and therefore the grievances of wrong metering would be eliminated.
- 5.1.3.4 With the implementation of System strengthening and AMI works, as a part of IPDS, there will be augmentation of existing old HT & LT switchgears, transformers, underground cables & meters, resulting not only in capacity addition of nearly 150 MVA in the present distribution capacity of 1000 MVA, making a total of 1150 MVA, which would be sufficient to meet the future load growth demand for next 20 years, considering the present peak load demand of 425 MVA, but also significant reduction of AT&C (Aggregate Technical & Commercial) losses because of improved design & energy efficiency aspect of the equipments proposed.
- 5.1.4 For improving power distribution infrastructure in NDMC area, following works have been completed in the year 2017-18.
  - (i) Two old 33/11 KV Power transformers at ESS Shahjahan Road, Raja Bazar & one 66/11 KV power transformer at ESS Vidyut Bhawan have been replaced & commissioned with new transformers.
- (ii) To meet power requirement of East Kidwai Nagar Commercial & residential project, being developed by NBCC, two 33 KV GIS based sub-stations have been established as a Deposit Work.
- (iii) For augmenting electric supply system in Pillanji Village, an electric sub-station of 2x1600 KVA capacity has been established & commissioned.

- (iv) For meeting the additional power requirement of newly added specialized facilities in Safdarjung Hospital, an additional 33/11 KV power transformer has been ordered & is being installed at Trauma Centre. This would be commissioned by March, 2018.
- (v) Three large outdoor high definition LED video screens have been provided & commissioned in Connaught Place & Khan Market areas.
- 5.1.5 For further strengthening of power distribution infrastructure in NDMC area, the following works are proposed in the year 2018-19:
- 5.1.5.1 **Auto Changeover Systems:-** Two auto changeover switching systems, installed in 11 KV sub-stations, at Khan Market & Raja Bazaar in 2017-18 and found effective, eight more important 11 KV sub-stations have been proposed for installation of auto changeover systems for enhancing reliability & availability of power supply, in important places. This will eliminate need of DG sets. Work shall be completed in the year 2018-19.
- 5.1.5.2 **Shifting of 66 KV feeders:-** The work of shifting 66KV feeders for "Construction of Integrated Transit Corridor Development Plan along Mathura Road to Mahatma Gandhi Marg, via underground tunnel below Pragati Maidan" shall be undertaken during the year 2018-19, as a "Deposit Work". An amount, equivalent to 20% cost of the deposit work, has been received and process for calling tenders initiated. The work shall be completed in the year 2018-19.
- 5.1.5.3 **33KV ESS AIIMS:-** The work of providing a 33KV GIS based ESS shall be undertaken as a deposit work in the year 2018-19. Estimate for the work has been issued & work shall be taken up on receipt of deposit money from AIIMS.
- 5.1.5.4 **33KV ESS at Church Road:-** A new 33 KV underground ESS at Church Road is proposed & work shall be taken up along with the civil construction work of the building, for which plans are being prepared.
- 5.1.5.5 **33KV** sub-station at Bapu Dham & Scindia House:- The existing old 33KV sub-station equipments in ESS Bapu Dham & Scindia House, Nehru Park, Kidwai Nagar (West) & Tilak Marg are proposed to be replaced with GIS switchgear in the year 2018-19. The estimate for the work has been approved & tenders are being invited.
- 5.1.5.6 A new 33KV ESS in Delhi Police Headquarter building, coming on Jai Singh Road shall be established as a "Deposit Work", for which deposit amount received, tenders called & work shall be completed in 2018-19.
- 5.1.5.7 **Replacement of old 33 KV cables:-** Old 33KV cable between ESS Vidyut Bhawan to Connaught Place via School Lane & from ESS Park Street to Hanuman Road to Electric Lane shall be replaced in the year 2018-19, for which cable procured & cable laying work is already awarded.

## 5.1.5.8 Additional Power requirement for Redevelopment of Government Colonies by NBCC

With NBCC taking up redevelopment works of Netaji Nagar, Nauroji Nagar and Sarojini Nagar Colonies, the load requirement is anticipated to be in excess of 100 MW. As a long term solution to the need of present & anticipated future load growth, a 220 KV sub-station has been proposed in the complex for which land & built up space shall be provided by NBCC and work executed by "Delhi Transco Ltd." (DTL) as a "Deposit Work". The work will be undertaken in the year 2018-19.

- 5.1.5.9 For safety of staff working at this ground level following new initiatives are proposed to be undertaken the 2018-19:
  - (a) **Maintenance free earthing**: To improve earth results for the safety & protection in power supply system, maintenance free earthing is proposed to be implemented in various sub-stations in NDMC areas. This would improve reliability & quality of power supply too. The work will be taken up in the year 2018-19.
  - (b) **Nitrogen injection Fire Prevention & extinguishing system**: For the safety of oil filled power transformers, Nitrogen injection Fire Prevention & extinguishing system is proposed to be implemented in eight, newly installed 66/11 & 33/11 KV power transformers in ESS at Vidyut Bhawan, Jorbagh, East Kidwai Nagar, Sahajahan Road, Raja Bazaar & Trauma Centre in the year 2018-19.
  - (c) **Arc Flash Protection Systems**: For the safety of O&M personals, all 11KV HT panels proposed in IPDS scheme for system strengthening work, shall be equipped with "Arc Flash Protection" system. Henceforth, store procurement of all 11KV panels shall be with "Arc Flash Protection" systems.

#### 5.1.5.10 WARM LED STREET LIGHTS

- 5.1.5.10.1 NDMC has initiated action to replace all conventional HPSV Street Light on 18000 poles with energy efficient individual control intelligent LED Street light in three phases. The tender for purchase of individual control warm LED street light fittings for phase-I work of 5867 number has already been invited. The supply order is likely to be awarded by end of the January 2018 and installation work will be completed in first quarter of 2018-19.
- 5.1.5.10.2 The replacement work of warm LED light of balance 12000 number of poles under Phase II at cost of Rs.66.5 crore and Phase III at cost of Rs.23.2 crore will be assigned to M/s Energy Efficiency Services Limited, a Joint Venture of PSUs of the Ministry of Power, Government of India, as Project Management Consultant (PMC) on 3% of the capital cost for execution of work and 5% of the capital cost for annual maintenance work, including administrative cost, with increase of 10% per annum for a period of 10 years from the date of commencement of the project.

- 5.1.5.10.3 NDMC is replacing conventional Sodium Vapour Light of 135 nos. High Mast with intelligent control energy efficient warm LED fittings, and the work will be completed by March, 2018 at a cost of Rs.3.58 crore.
- 5.1.6 In the year, I propose to allocate a sum of Rs.1304.81 crore, of which Rs.124.77 crore will be expenditure of capital nature.

#### 5.2 WATER MANAGEMENT

#### 5.2.1 24 x 7 Water Supply in NDMC

- 5.2.1.1 The total project shall include 100% replacement of water meters, HSC lines, creation of DMAs, Water quality sensors, replacement of main water lines (wherever required), reduction in NRW, Water Balancing through Water GEM software, SCADA etc. The project will be implemented in two Phases: 1<sup>st</sup> Phase is for about Rs. 68 crore which includes:
  - a) replacement of 100% HSC pipelines.
  - b) replacement of 100% water meters with AMR meters.
  - c) creation of a sample DMA.
- 5.2.1.2 After completion of Phase-I in the year 2018-19, work of SCADA, replacement of damaged pipelines, pump houses and DMAs will be taken up in Phase-II on the basis of outcomes of Phase-I. I am proposing to complete the phase I in the year 2018-19.

#### **5.2.2** Strengthening of Water Supply Infrastructure

In the year 2017-18 strengthening of water supply system in NDMC area was undertaken including strengthening of water supply system at Pillanji Village, shifting of main line and providing metered water connection at B.K. Dutt Colony; replacing & Shifting of 500mm / 450mm dia D.I. Pipeline from Gopal Dass Building to Shivaji Stadium Terminal in the Outer Circle of Connaught Place. In the year 2018-19, the following is proposed:

- (i) Providing and laying 100mm dia DI pipeline for unfiltered water supply system at Mother Teresa Crescent & S.P. Marg for Horticulture Purpose;
- (ii) Interconnection of water boosting station at Laxmi Bai Nagar, Sarojini Nagar & Vinay Marg by laying 150mm dia DI Pipe Line;
- (iii) Replacement of existing 12 Nos. M.S. Tanks of existing Water Trolleys (3.5KL) with Stainless Steel Tanks- 6.5KL (Grade Fe 304) etc.
- (iv) Laying filtered water hydrant and Deep-Well hand pumps in JJ Clusters
- 5.2.3 A provision of Rs.171.84 Crore has been kept for Water Supply work in BE 2018-19 out of which Rs.8.69 Crore are for capital expenditure.

#### 5.3 SEWER MAINTENANCE

5.3.1 I am proud to inform you that NDMC uses only pressure jet machines and suction/recycler to clean the sewer system.

- 5.3.2 In the year 2017-18, NDMC replaced sewer line in Pillangi Village. NDMC hired two Pressure Jetting cum Sewer Suction Machine for clearing sewer lines for 3 years and 2 Jetting cum Suction Sewer Cleaning Machines with Water Recycling Technology for 7 years. A 300 mm dia sewer line was laid in Krishna Menon Lane. Sewerage lines were shifted in North Avenue MPs' Flats, East Kidwai Nagar, from the construction site of Dr. Ambedkar International Centre, etc. Sewer lines were re-laid at Shanti Vihar Moti Bagh-I. The old sewer line in network at back lane of Tuglak Crescent New Delhi was replaced.
- 5.3.3 I propose the following major works to be undertaken in the year 2018-19 for sewer maintenance:
  - (i) lay 400mm dia sewer line from Arjun Dass Camp to B-Avenue;
  - (ii) lay sewer line by cured in place pipe (CIPP) method from Satya Marg to Kautliya Marg at Shanti Path;
  - (iii) desilt/clean sewer line of 66" dia trunk brick barrel sewer line from Q Point via P.R. lane Khan Market to Dayal Singh College Lodhi Road;
  - (iv) shift 450mm dia sewer line from Anant Ram Dairy to Palika Bhawan Netaji Nagar;
  - (v) de-silting & Rehabilitation of sewer line 1100-1200 mm dia at Ashoka Road from Nirvachan Sadan to C- Hexagon;
  - (vi) de-silting and rehabilitation of brick barrel 1905 mm dia from Kushak Nalah to Aurbindo Marg at Brigadier Hoshiyar Singh Road;
- (vii) de-silting and rehabilitation of brick barrel 990mm dia from Outer circle CP to C-hexagon through K.G. Marg;
- (viii) de-silt/clean sewer lines Machine in President Estate, New Delhi (Deposit Work)
- 5.3.4 In 2018-19, I have allocated a sum of Rs.138.13 crore towards sewerage maintenance schemes. Of these, Rs.25.35 crore will be towards capital expenditure.

#### 5.4 RESURFACING OF ROADS

- 5.4.1 As per recommendations of CRRI, the resurfacing work of 09 Roads has already been completed through Hot & Cold Mix technology and the work of Micro surfacing through Cold Mix technology on remaining 16 Roads is in progress and shall be completed in current Financial Year. The resurfacing work of Inner/outer circle C.P. including all radials shall also be completed by March, 2018.
- 5.4.2 For improving the ridding quality of 57 Roads, measuring 51 Km in length, the CRRI has been engaged for evaluation and to give the recommendations for treatment required. The evaluation process in CRRI is in progress for their recommendations regarding improvement with bituminous concrete/micro surfacing and their complete findings are expected by March, 2018. The work, estimated to cost approx. Rs.16 crore is therefore proposed to be executed in the Financial year 2018-19.
- 5.4.3 In the year 2018-19, I have proposed to allocate a sum of Rs.138.26 crore for roads and pavements. Of this amount, Rs.31.70 crore will be spent towards capital expenditure.

## 5.5 INTEGRATED TRANSIT TRANSPORT INFRASTRUCTURE REDEVELOPMENT OF SHIVAJI TERMINAL

The tender of Shivaji Terminal is being called to create world class infrastructure through NDMC SPV as per provisions of MPD-2021. Design and estimates have been finalized. Statutory clearances, including DUAC (in principle) and Delhi Fire Services, have been obtained. Work will be started in the year 2018-19 for which Rs.39.60 Crore has been made available. Project will be completed in the year 2019-20.

#### 5.6 CONSTRUCTION OF COMMERCIAL COMPLEX AT YASHWANT PLACE

A multi storey Office Complex having 4 Basement + 10 Storey is being proposed to develop infrastructure for office spaces for regular income which Rs.150.00 Crore has been made available. Work will be started in year 2018-19.

#### 5.7 DEVELOPMENT OF BAPU SAMAJ SEWA KENDRA

It is proposed to construct multipurpose hall with 3 Storey Building with basement for Social and Culture Activities with office space for which work has been awarded with tendered amount of Rs.25 crore. Work will be completed in the year 2019-2020.

#### 5.8 CONSTRUCTION OF MECHANICAL PARKING

#### 5.8.1 80 ECS capacity Mechanical Parking at Charak Palika Hospital

- 5.8.1.1 There are 150 Doctors posted at Charak Palika Hospital and they perform duties in shifts. Public / patients visits at Charak Palika Hospitals daily for treatment in O.P.D. and O.T. About, 80 cars are normally parked from 8 A.M. to 8 P.M. daily which creates a lot of problem in movement of vehicles and emergency vehicles, sometimes are stuck. Long duration operation of vehicles also create air pollution and noise pollution and also create hindrance in keeping the complex clean at all the times. Creation of multi level parking will solve these problems to a large extent.
- 5.8.1.2 Therefore, it is proposed that four level over ground mechanical parking for 80 number of cars be set-up within the complex of Charak Palika Hospital in the year 2018-19.

#### 5.8.2 Underground Mechanical Car Parking at Khan Market

Khan Market is a well-established and high foot falls market of Central Delhi. Several people visit Khan Market every-day. L&DO has allotted a plot measuring nearly 5000sq. m. for creating underground car parking without any over-ground construction. Therefore, NDMC would create underground Car Parking for parking of about 800 cars.

#### 5.8.3 Mechanical Car Parking for 245 ECS behind LIC Building at Janpath Lane

There is huge demand for parking space during day time and office hours near LIC building and Janpath Lane. A piece of land behind LIC Building is available with NDMC, which is being used for surface parking. In order to create more space on roads for movement of

vehicles and pedestrian, as well as parking space, it is proposed to create five level over ground mechanical car parking for 245 cars in the year 2018-19.

#### 5.9 HOUSING FOR MUNICIPAL EMPLOYEES

To improve availability of houses to NDMC employees, following action has been taken in the year 2017-18 and contemplated in the year 2018-19:

- (i) construction of 240 EWS quarters at Bakkarwala under JNNURM has been completed and possession of the same will be handed over to DUSIB by March, 2018 at a cost of Rs. 24 crore.
- (ii) to construct 188 Type-II Flats at Aliganj, work has been awarded at a cost of about Rs.44 crore in the year 2017-18, and is likely to be completed by year 2019-2020.
- (iii) tender for construction of 292 Type-IV & Type-V residential quarters at Arjun Dass Camp will be issued by March, 2018 as necessary statutory clearances, including forest clearance for tree cutting, have been obtained. Detailed estimates have been prepared and the work will be completed by 2019-2020 at an estimated cost of Rs.211 crore:
- (iv) tender for construction of 160 Nos. Type-III Flats at Sector-VI Saket and 120 Type-II Flats at Sector-VII Saket will be issued by March, 2018 as necessary statutory clearances, including tree cutting permission, have been obtained. Detailed estimates have been prepared and the work will be completed by 2019-2020 at an estimated cost of about Rs.128 crore.

#### 6. FINANCIAL STABILITY AND OTHER INITIATIVES

#### 6.1 NDMC's Credit Rating

You will be pleased to know that NDMC was one of very few municipalities in India to have achieved a credit rating of "AA+" in the year 2016-17 and 2017-18 from the credit rating agency M/s CARE Limited. This rating was given by a reputable agency after it made an objective and independent assessment of NDMC's financial position. This rating is significant as it underlines NDMC's constant endeavour to deliver "the best bang for the buck" while managing its financial resources efficiently and effectively.

#### 6.2 Untied Funds (Citizen- Driven Development)

For 2018-19, I propose to make available untied funds for the Resident Welfare Associations (RWAs) and Market Trade Associations (MTAs) of the NDMC area. For this purpose, I propose to set aside a sum of Rs. 10.00 crore in the year 2018-19 with an objective to provide scope for local initiative and flexibility for local action by the RWAs/ MTAs. Works of emergent nature will be undertaken on the basis of requests received from RWAs/MTAs, which are normally not covered under the schemes proposed by NDMC. This fund will be allocated for further improving the public utility infrastructure and facilities/services as per the requirements of the residents / traders. The proposed untied funds should be

developmental in nature, based on the locally-felt needs to increase the efficiency of capital assets already created and to add to the productivity and welfare and not for recurring works.

#### 6.3 Pension Fund

As pension payments liabilities of NDMC are increasing every year, an actuarial study was conducted in the year 2017-18. Council approved the proposal for creation of Pension Fund in order to meet pension liabilities on regular basis at optimized cost to NDMC. Requisite Regulations in this regard has been made which will be placed before the Council before seeking approval of Ministry of Home Affairs by March, 2018.

#### 6.4 Other Initiatives

#### **6.4.1** Renewal of pending licences of Estate Properties

- 6.4.1.1 Keeping in view of the hardships being faced by the shopkeepers of various NDMC's markets due to non-renewal and transfer/regularization etc. of their licenses for want of policy decision, a policy was approved by the Council vide resolution no. 31 (L-08) dated 27.06.2016 in this regard.
- 6.4.1.2 Subsequent to the approval of the Council, a circular dated 16.08.2016 was issued for renewal of licenses, sealing application, change of trade, transfer of license on legal heir basis, transfer of license on partnership basis, clubbing of units, subletting damages on cancellation and revocation of cancellation of license, interest rate on delayed or non-payment, sealing and de-sealing of premises, mutual exchange etc.
- 6.4.1.3 Estate-I Department has conducted mass renewal camps in various markets where numbers of pending cases were in sizeable numbers. In about 7 camps, as many as 450 cases including renewals of licenses, transfer on legal heirs basis and partnership cases have been done. In the mass renewal camps, the license deeds were executed and were handed over to the licensees on the spot, the entire process was videographed in the presence of all Market Associations, Council Members and other officers. Since large number of such cases were pending, efforts will be made to clear backlog in 2018-19.

#### 6.4.2 Yoga International Day and Run for Unity

I am happy to inform that NDMC acted as lead organization to successfully organize programmes for International Yoga Day on 21<sup>st</sup> June, 2017 and Run for Unity on 31<sup>st</sup> October, 2017 in Delhi, which has been appreciated by all. It was first time in the history of NDMC that Hon'ble President, Hon'ble Vice President, Hon'ble Prime Minister, Hon'ble Home Minister, Hon'ble Minister for Union Development and Hon'ble Lieutenant Governor, Delhi participated in a programme organised by NDMC at Patel Chowk on Parliament Street on 31.10.2017 in this regard.

#### **6.4.3** International exposure to Grass-root Employees

6.4.3.1 On the invitation of City of Leuven, a 24 members delegation consisting officials of Horticulture Department, Education Department, Health Department, Civil

Engineering Department under a Director, NDMC, including six students of NDMC / Navyug schools, visited Belgium from 22.06.2017 to 28.06.2017. They visited a Vocational Training Centre for horticulture, a school under Municipal Education Department and interacted with teachers & students. Delegates visited Academic Hospital - 2<sup>nd</sup> largest in Europe. Hi tech companies which have developed e-health solutions and smart technologies for healthcare.

A team of 17 members consisting of officials of various levels such as Safai Karmachari, Sanitary Inspector, Mason, Gardener, Accounts Officer, Sewerman, Assistant Engineer visited Beijing for 5 days in March-April, 2017. They visited the municipal agencies such as Beijing Public Transport Holdings Ltd., Beijing Waterworks Group, Beijing Municipal Commission of Economy & Information Technology, Beijing Municipal Commission of City Planning, Beijing Gardening & Greening Bureau, Beijing Environment & Sanitation Engineering Group Ltd. and Beijing Emergency Medical Centre. They observed the high focus on excellence in task performance at all levels. They learned about the processes which could be adopted in NDMC. I am proposing to continue such exposure visit in 2018-19.

#### **6.4.4** Twin-city Agreement

NDMC has entered into a Twin City Agreement with the City of Leuven, Belgium during the visit of the Kingdom of Belgium to New Delhi in November 2017 to exchange the expertise and co-operation in the fields of Smart City, e-Government, Transportation, Culture, Tourism and MICE Industry, Climate Change and the Environment, Service Delivery, Civic Administration, Education, Sports, Waste-water & Solid Waste Management, Infrastructure, Public Health, Science & Technology, Heritage Management, Urban Renewal, Urban and Regional Planning, and related matters to support shared prosperity and development of the NDMC and City of Leuven. It is proposed that NDMC would formulate specific activities for the year 2018-19, including employee / students exchange programme, to achieve desired results as per this Twin City Agreement.

#### 7. RECEIPTS

#### 7.1 Receipts from Electricity Distribution

- 7.1.1 In order to strengthen the overall financial position of the Power sector, NDMC has embarked on purchasing cheaper power from power exchanges instead of buying expensive power from the costly power generating stations.
- 7.1.2 Over the last three years, NDMC has been continuously striving to reduce the power procurement cost while catering increased needs in power demand. Rs.1050 Cr were incurred in year 2014-15 to procure 1504 MUs, whereas 1554 MUs were procured at an expenditure of Rs. 932 Cr in 2015-16. The improvement is peaked in year 2016-17, when 1700 MUs of power were procured at a cost of Rs.831 Cr., which is historically low. It is likely that the expenditure would be around Rs. 850 Cr whereas more MUs would be procured in the year

2017-18. On the collection front, NDMC has improved its collection efficiency from 94.3% in 2015-16 to 97.2% in 2016-17, which is likely to be improved further.

7.1.3 The total revenue receipts from Electricity Distribution have been projected in RE 2017-18 at Rs. 1178.21 crore as against actuals Rs. 1119.27 crore in the year 2016-17. The projections for BE 2018-19 are at Rs. 1227.04 crore.

#### 7.2 Receipts from Property Tax

NDMC is steadily increasing Property Tax collections without any increase in property tax rates. I am happy to report that in the year 2016-17 we have collected Rs.574.43 crore. We are expecting to collect property tax of Rs. 575.00 crore in 2017-18 despite a court case challenging the Unit Area Method. However, for BE 2018-19, we plan to collect Rs. 616.00 crore assuming that the court case will be decided. I do not propose any increase in Property Tax rates for the year 2018-19.

## 7.3 Receipts from Licence Fee from Municipal Properties

- 7.3.1 Three hotels have been put on auction from which the major amount of licence fee is expected in next year.
- 7.3.2 The actual receipts in 2016-17 for Licence Fee from municipal Properties stood at Rs. 400.82 Crore. The projections for RE 2017-18 are at Rs. 519.31 crore and BE 2018-19 are at Rs. 594.04 crore.
- 7.4 NDMC will take all steps to use resources including financial judicially.

Hon'ble Members, your Council has completed statutory formalities in implementing many projects in year 2017-18 which will show desired results in 2018-19. This will make the New Delhi one of the most livable city.

I place on record my sincere heartfelt gratitude for the guidance and support received from Hon'ble Minister of the Ministry of Home Affairs, Hon'ble Minister of the Ministry of Urban Development, Government of India, Hon'ble Lieutenant Governor of Delhi and Hon'ble Chief Minister.

I would like to thank Hon'ble Member of Parliament, Vice-Chairman of the Council, Hon'ble MLA and distinguished Members of the Council for their relentless positive support given to me on regular basis.

I would also like to thanks to my all colleagues specially Safai Sevaks, Malies, Beldars and Line Men for their continuous support in making NDMC to perform successfully in all of its functional areas.

Thank v	7011	MORN	much
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Jai Hind.

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