Special provision for the benefit of differently-abled persons under DAY-NULM

7.34 During 01.01.2018 to 31.03.2019, number of 822 differently-abled persons have been assisted with loans for setting up individual/group micro-enterprises, 2,147 beneficiaries have been provided skill training and 7,465 beneficiaries have been included as members in Self Help Groups.

Prime Minister's New 15-Point Programme for the welfare of Minority Communities

7.35 15% of financial and physical targets are earmarked to benefit urban poor from minority communities. During 01.01.2018 to 31.03.2019, number of 19,284 minority urban poor have been assisted in setting up of individual/group micro enterprises, 23,425 beneficiaries have been imparted skill training, 1,19,204 beneficiaries have joined SHGs and 1,48,459 beneficiaries have availed bank-linkages under the SHG-bank linkage programme. An expenditure of Rs. 181.26 crore has been incurred during 01.01.2018 to 31.03.2019.

Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014

7.36 The objective of the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act, 2014 is to protect the rights of urban street vendors and to regulate street vending activities. States/UTs (with legislature) are the appropriate government for framing of Rules and Schemes under Street Vendors' Act for their respective States/UTs. Ministry being the appropriate Government for UTs (without Legislature) has framed Rules and Schemes under the said Act.

7.37 So far 33 States/UTs viz. Andhra Pradesh, Arunachal Pradesh, Assam, A&N Islands, Bihar, Chandigarh, Chhattisgarh, D&N Haveli, Diu & Daman, Delhi, Gujarat, Goa, Haryana, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Puducherry, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal have notified Rules and 25 States/UTs viz. Andhra Pradesh, Arunachal Pradesh, Andaman Nicobar & Islands, Bihar, Chandigarh, Chhattisgarh, D&N Haveli, Diu & Daman, Goa, Gujarat, Himachal Pradesh, Jharkhand, Kerala, Madhya Pradesh, Maharashtra, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura and Uttar Pradesh have notified the scheme.
Beneficiaries doing practical class of Fitter Electrical & Electronic, Jharkhand

Street Vending Market
Shelter for urban homeless, Sitamarhi, Bihar

Soft Skill Training under Yashaswi Programme, Jaipur, Rajasthan
SHG members engaged in making home decor items for income generation. Jaipur, Rajasthan

Swachhata Excellance Award to Yougandhara, ALF, Maharashtra
8.01 The National Heritage City Development and Augmentation Yojana (HRIDAY), a central sector scheme of the Government of India with a total outlay of Rs. 500 crore, was launched on 21st January, 2015 with the aim of bringing together urban planning, economic growth and heritage conservation in an inclusive manner with the objective of preserving the heritage character and rejuvenating the soul of each Heritage city.

8.02 The mission period of the scheme ended on 31st March, 2019 and it was implemented in the 12 identified cities of Ajmer, Amaravati, Amritsar, Badami, Dwarka, Gaya, Kancheepuram, Mathura, Puri, Varanasi, Velankanni and Warangal

8.03 Milestones Achieved till date

i. City HRIDAY Plans (CHP) for the 12 cities identified under the scheme were approved. The City HRIDAY Plan includes gap analysis of infrastructural requirements for identified zones and proposed shelf of projects to be undertaken.

ii. 77 projects worth Rs. 418.06 crore approved under the Scheme out of which installments worth Rs. 402.44 crore released.

iii. A total of Rs. 150.03 cr was released during 2018-19, out of which Rs. 141.96 cr was towards project implementation. As on 31st March, 2019, the physical progress of the scheme stands at 81%

iv. Of the 77 projects, 40 projects worth Rs. 232.35 crore have been completed till 31st March, 2019. These projects include up-gradation and thematic development of approach roads to heritage sites, lakefront development, development of landscape gardens, development of heritage walks, installation of heritage sensitive LED street lights, infrastructure development around heritage sites etc.

v. The remaining 37 projects, which pertain to the finishing works to be carried out by the Municipal Corporations / Local bodies, would be completed by May, 2019.

8.04 Capacity Building

• In order to build the capacity of the city mission directorates towards maintaining the assets after the completion of the HRIDAY period, a sustainability workshop was held at SPA, Bhopal in August, 2018 for all HRIDAY city officials and subsequent workshops
were held at NIUA, Delhi, on the 7th December, 2018 and 1st March, 2019 in order to finalize the sustainability frameworks for each of the cities.

8.05 **IEC Activities**

• In order to showcase the work conducted under the scheme so far, HRIDAY stalls were exhibited at the Pravasi Bhartiya Diwas organized during 21-23 January, 2019 at Varanasi and during the Vibrant Gujarat Summit organized during 17-22 January, 2019 at Ahmedabad.

• In order to promote the tangible and intangible heritage of the cities, HRIDAY Cultural events were held in Varanasi, Ajmer, Amritsar and Kancheepuram. These events included music and dance events along with art and crafts competitions.

8.06 **Photographs of some of the HRIDAY projects sites**

*Before/ After View of Development of Subhash Udyan at Ajmer*

*Before/ After View of Development of Landscape Garden at BankiMuhana, Puri*
Before/After View of Annasagar Lakefront Development at Ajmer

Before/After View of Development of Brahmsat Sarovar, Gaya

Before/After View of Renovation and Adaptive reuse Town hall, Varanasi
Before/After View of Renovation of Iskon Gate, Dwarka

Before/After View of Museum developed inside Rambagh Gate, Amritsar

Before/After View of Upgradation and Thematic Development of Kamaccha Road, Varanasi
9.01 A city can be productive if it has a very sound infrastructure and good services. Urban Transport is a crucial component of urban infrastructure. It provides access to opportunities, supports urban economic activities, and facilitates social interactions. A good network of roads and an efficient Mass Urban Transport System make significant contributions to improve the working efficiency of a city and its environs. The extent to which the Indian cities can maximize economic performance and reduce poverty will be closely linked to how efficiently their transport system moves people and goods upon which their socio-economic activities depend. The rapidly growing urban population exerts an increasing pressure on the urban transport system resulting in deterioration of urban transport system thus lowering economic productivity. Hence, development of cities through prioritizing urban transport is a step forward in this direction. Global experience has also shown that an efficient shift to Public Transport can occur only if urban transport is assimilated at the conception stage of land-use and urban planning.

9.02 Ministry of Housing and Urban Affairs (MoHUA) is the nodal Ministry for planning and coordination of Urban Transport matters at the central level. However, technical planning of rail transport continues to be with Ministry of Railways. Similarly, road transport is the responsibility of the Ministry of Road Transport and Highways. However, the major responsibility for urban transport infrastructure and service delivery rests with State Governments and local bodies. There are number of projects, schemes and initiatives by MoHUA, which are outlined as under:

**National Urban Transport Policy (NUTP), 2006**

9.03 In order to deal with the emerging problems in Urban Transport, the Government of India formulated a National Urban Transport Policy in 2006. The policy seeks to promote integrated land use and transport planning, greater use of public transport and non-motorized modes of travel along with use of cleaner technologies. It offers Central Government’s financial support for investments in public transport, infrastructure for greater use of non-motorized modes, as well as in the construction of parking facilities, including demonstrative pilot projects. It encourages capacity building at institutional and individual levels, innovative financing mechanisms, institutional coordination, association of the private sector and need for public awareness and cooperation.

**Standardization and Indigenization of Metro Rail Systems**

9.04 To promote indigenization and reduction in cost, the specifications of various metro rail components like rolling stock, signalling systems, electrical & electro-mechanical components
and civil engineering structures have been standardized. These mandatory parameters will ensure that metro rail sub systems for all new metro projects conform to the prescribed standards. Specific steps for promoting ‘Make in India’ have also been stipulated in these standards. A standard eligibility criterion for procurement of rolling stock is also issued.

I-Metros (Indian Metro Rail Organisations’ Society)

9.05 A platform to exchange ideas, pooling of knowledge and sharing of experience, best practices, innovations etc. among the Indian metro rail companies to nurture excellence in performance, was launched in March 2018.

Metro Rail Policy, 2017

9.06 The policy was launched for ascertaining and enhancing the feasibility of metro rail projects from economic, social and environmental perspective. It creates an ecosystem for the rapid development of Metro Rails in the larger cities under different models including Public Private Partnerships and paves way for ‘Make in India’ products in the sector.

Metro Rail Projects with Joint Venture of Central and State Governments

Delhi Metro Phase-3

9.07 Delhi Metro Phase-III, additional corridors and NCR extensions cover a length of about 160 km. Sanctioned cost of Phase III including extensions to Shiv Vihar, Faridabad, Bahadurgarh, Ballabgarh, Najafgarh, Dhansa, Kalindi Kunj-Botanical Garden, Noida City Centre – Noida Electronic City and Dilshad Garden – Shaheed Sthal (New Bus Adda) Ghaziabad is Rs.48565.12 Crore Physical progress of Phase III and various extensions as on 31.03.2019 is as below:

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Route length (km)</th>
<th>Physical progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jahangirpuri to Samaypur Badli</td>
<td>4.373</td>
<td>Commissioned on 10.11.2015</td>
</tr>
<tr>
<td>Central Secretariat to Kashmere Gate Majlis Park – Gokulpuri – Shiv Vihar</td>
<td>9.370</td>
<td>Commissioned on 28.05.17</td>
</tr>
<tr>
<td>Stage 1: Majlis Park to Durgabai Deshmukh South Campus</td>
<td>21.565</td>
<td>Commissioned on 14.03.18</td>
</tr>
<tr>
<td>Stage 2: Durgabai Deshmukh South Campus to Lajpat Nagar</td>
<td>8.534</td>
<td>Commissioned on 06.08.18</td>
</tr>
<tr>
<td>Stage 3: Trilokpuri to Gokulpuri to Shiv Vihar</td>
<td>17.864</td>
<td>Commissioned on 31.10.18</td>
</tr>
<tr>
<td>Corridor</td>
<td>Route length(km)</td>
<td>Physical progress</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Stage 4: Lajpat Nagar to Mayur ViharPktI</td>
<td>9.630</td>
<td>Commissioned on 31.12.18</td>
</tr>
<tr>
<td>Stage 5: Mayur ViharPkt I to Trilokpuri</td>
<td>About 0.851</td>
<td>Date will be fixed after resolution of R&amp;R issue at Trilokpuri</td>
</tr>
<tr>
<td>Janakpuri West – Kalindi Kunj – Botanical Garden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage 1: Kalkaji Mandir to Kalindi Kunj to Botanical Garden Noida</td>
<td>12.641</td>
<td>Commissioned on 25.12.17</td>
</tr>
<tr>
<td>Stage 2: Janakpuri West to Kalkaji Mandir</td>
<td>24.820</td>
<td>Commissioned on 28.05.18</td>
</tr>
<tr>
<td><strong>Additional Corridors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gokulpuri to Shiv Vihar</td>
<td></td>
<td>Commissioned with Stage 3 of Majlis Park – Gokulpuri-Shiv Vihar corridor</td>
</tr>
<tr>
<td>Connection from Dwarka to Najafgarh</td>
<td>4.295</td>
<td>78%(Targeted for Sept 2019)</td>
</tr>
<tr>
<td>Extension from Najafgarh to Dhansa Bus Stand</td>
<td>1.180</td>
<td>13%(Targeted for Dec 2020)</td>
</tr>
<tr>
<td><strong>NCR Extensions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension from Badarpur to Escorts Mujesar, Faridabad</td>
<td>13.875</td>
<td>Commissioned on 06.09.2015</td>
</tr>
<tr>
<td>Extension from Mundka to Bri. HoshiyarSingh, Bahadurgarh</td>
<td>11.183</td>
<td>Commissioned on 24.06.18</td>
</tr>
<tr>
<td>Extension from Escorts Mujesar to Raja Nahar Singh, Ballabhgarh</td>
<td>3.350</td>
<td>Commissioned on 19.11.18</td>
</tr>
<tr>
<td>Kalindi Kunj – Botanical Garden, Noida</td>
<td></td>
<td>Commissioned on 25.12.17 with Stage 1 of Janakpuri West to Kalindi Kunj corridor.</td>
</tr>
<tr>
<td>Dilshad Garden – Shaheed Sthal (New Bus Adda) Ghaziabad</td>
<td>9.635</td>
<td>Commissioned on 08.03.2019</td>
</tr>
<tr>
<td>Noida City Centre – Noida Electronic City</td>
<td>6.799</td>
<td>Commissioned on 09.03.2019</td>
</tr>
<tr>
<td><strong>Delhi MRTS Phase-III and extensions (Overall)</strong></td>
<td>About 160</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 9  
Page 111
Flagging off of South Campus to Lajpat Nagar Section of Phase-3 project on 06.08.2018 by Hon’ble Minister (I/C) of Housing and Urban Development Ministry, Shri Hardeep Singh Puri and Hon’ble Chief Minister of NCT of Delhi, Shri Arvind Kejriwal

Flagging off of Trilokpuri to Shiv Vihar Section of Phase-3 project on 31.10.2018 by Hon’ble Minister (I/C) of Housing and Urban Development Ministry, Shri Hardeep Singh Puri and Hon’ble Deputy Chief Minister of NCT of Delhi, Shri Manish Sisodia
Flagging off of Lajpat Nagar to Mayur ViharPkt I Section of Phase-3 project on 31.12.2018 by Hon’ble Minister (I/C) of Housing and Urban Development Ministry, Shri Hardeep Singh Puri and Hon’ble Deputy Chief Minister of NCT of Delhi, Shri Manish Sisodia.

Flagging off of Dilshad Garden – Shaheed Sthal (New Bus Adda) Ghaziabad Corridor on 08.03.2019 by Hon’ble Prime Minister, Shri Narendra Modi in the presence of Hon’ble Chief Minister of Uttar Pradesh, Shri Yogi Adityanath.
Flagging off of Noida City Centre to Noida Electronic City Corridor on 09.03.2019 by Hon’ble Prime Minister, Shri Narendra Modi in the presence of Hon’ble Chief Minister of Uttar Pradesh, Shri Yogi Adityanath.

Delhi Metro Phase-IV Project

9.08 In March, 2019, Government of India has approved three priority corridors of Delhi Metro Phase-IV project of 61.679 km route length at a total completion cost of Rs. 24948.65 crores. The details of three priority corridors of Phase-IV of Delhi Metro are given below:

1. Aerocity to Tughlakabad (20.201 km).
3. Mukundpur – Maujpur within Delhi Area (12.558 km).

Bangalore Metro Rail Project Phase-1

9.09 The Bangalore Metro Rail Project - Phase 1 covers 42.3 km of network length with 40 stations. Out of 42.3 km, 8.82 km is underground and the rest is elevated except a small stretch at ground level at Baiyappanahalli Station. The total project cost of phase-1 is Rs.13,845.01 crore. This project is fully operational with effect from June, 2017.
Bangalore Metro Rail Project Phase-2

9.10 Government of India approved the Phase-2 of Bangalore Metro Rail Project in February, 2014. The total route length of Phase-2 is 72.095 km with 61 stations at the cost of Rs 26,405.00 crores. The physical and financial progress of Phase-2 as on 31.03.2019 is 30% and 32% respectively.

Chennai Metro Rail Project Phase-1

9.11 The Chennai Metro Rail Project covers a total length of 45.046 km at a total estimated cost of Rs 14,600 crores. Complete stretch of Phase-1 project has been commissioned with the last stretch from AG-DMS to Washermenpet inaugurated for passenger services by the Hon'ble Prime Minister of India, Shri Narendra Modi and the Hon'ble Chief Minister of Tamil Nadu, Shri Edappadi K Palaniswami on 10.02.2019. Physical and Financial Progress of the project as on 31.03.2019 is 96% and 95.24% respectively.

Inauguration of Passenger Services in the last stretch of the Chennai Metro Rail Project from AG-DMS to Washermenpet by the Hon'ble Prime Minister of India, Shri Narendra Modi and the Hon'ble Chief Minister of Tamil Nadu, Shri Edappadi K Palaniswami via video conferencing at Thiruppur, Tamil Nadu on 10.02.019.
Extension of Chennai Metro Rail Project Phase-1

9.12 The Extension of Chennai Metro Rail Project Phase-1 covers a length of 9.051 km at a total estimated cost of Rs 3,770 crores. The project was approved on 15.06.2016. Physical and Financial Progress of this project as on 31.03.2019 is 24% and 39.68% respectively.

Nagpur Metro Rail Project

9.13 The Nagpur Metro Rail Project consists of 38.215 km of elevated Metro Corridor which includes 38 stations and 2 train maintenance Depots. The alignment is divided into two corridors i.e. North-South from Automotive Square to MIHAN (19.658 Km) & East-West from Prajapati Nagar to Lokmany Nagar (18.557 Km). The estimated completion Cost is Rs. 8,680 crores. The project was approved on 20.08.2014 by the Union Cabinet. A stretch of 13.5 km section from Khapri to Sitabuldi has been inaugurated by Hon’ble Prime Minister on 07.03.2019. This section has been completed in a record time of 44 months. Civil works on balance stations and viaduct are in full swing. For Nagpur Metro Rail Project, Physical and Financial Progress as on 31.03.2019 is 78.31% and 63.96% respectively.

Kochi Metro Rail Project

9.14 Kochi Metro Rail Project covers a length of 25.612 km at a completion cost of Rs. 5181.79 crore from Alwaye to Pette with 22 elevated metro stations. The first reach of the project covering the Aluva-Palarivattom corridor with a total length of 13.4 km was inaugurated by the Hon’ble Prime Minister, Shri Narendra Modi on 17.06.2017. The second part of Phase-I with 5 km stretch from Palarivottam to Maharaja College was commissioned on 03.10.2017. Overall physical and financial progress as on 31.03.2019 is 92.90% and 92% respectively.
Mumbai Metro Line-3

9.15 Mumbai Metro Rail Project covers a length of 33.5 km from Colaba- Bandra- SEEPZ with 27 stations. It connects major CBDs of Nariman point and Bandra-Kurla Complex. The approved completion cost of the project is Rs. 23,136 crore. The physical and financial progress as on 31.03.2019 is 37.09% and 40.63% respectively.

Ahmedabad Metro Rail Project Phase-1

9.16 Ahmedabad Metro Rail Project Phase-1 consists of two corridors for a total length of 35.96 km namely (i) North-South Corridor (APMC to Motera Stadium-15.42 km) and (ii) East-West Corridor (Thaltej Gam to Vastral Gam- 20.54 km). Priority Reach-1 Section of network length 6.5 km from Apparel Park Station to Vastral Gam Station has been inaugurated on 04.03.2019 by Hon’ble Prime Minister, Shri Narendra Modi. Total physical and financial progress of the project as on 31.03.2019 is 45% and 48% respectively.
Ahmedabad Metro Rail Project Phase-2

9.17 Ahmedabad Metro Rail Project Phase-2 consists of two corridors for a total length of 28.254 km viz. Motera Stadium to Mahatma Mandir (22.838 km) and Gujarat National Law University (GNLU) to GIFT city (5.416 km) at a total completion cost of Rs 5384.17 crore. The project has been sanctioned on 9.3.2019. The project will be implemented within a period of 5 years from the date of approval.

Lucknow Metro Rail Project Phase – 1A

9.18 Lucknow Metro Rail Project Phase - 1A along the Corridor–1 covers a length of 22.878 km from CCS Airport to Munshi Pulia at an estimated cost of Rs. 6928 crore. The project has been approved by the cabinet in its meeting held on 22.12.2015. The 8.5 km stretch from Transport Nagar to Charbagh (Elevated) has become operational w.e.f. 05.09.2017. The complete stretch of Lucknow Metro on whole North-South corridor (Phase 1A) from Chaudhary Charan Singh Airport to Munshi Pulia (22.878 km) became operational ahead of its schedule and was inaugurated by Hon'ble Prime Minister, Shri Narendra Modi on 08.03.2019. The total physical and financial progress as on 31.03.2019 is 100% and 95% respectively.

Inauguration of whole North-South corridor (Phase 1A) of Lucknow Metro from Chaudhary Charan Singh Airport to Munshi Pulia (22.878 km) for passenger services on 08.03.2019 by the Hon'ble Prime Minister in the presence of Hon'ble Governor, Uttar Pradesh and Hon'ble Chief Minister, Uttar Pradesh.
Pune Metro Rail Project

9.19 The Pune Metro Rail Project consists of 31.254 km (26.23 km elevated & 5.02 km underground) divided into two corridors i.e. from Pimpri Chinchwad Municipal Corporation (PCMC) to Swargate (16.59 Km) and from Vanaz to Ramwadi (14.66 km) with 30 stations and two Car Maintenance Depots. The approved completion cost is Rs. 11,420 crores. The Physical and Financial progress of the project as on 31.03.2019 is 30% and 20.50% respectively.

Noida-Greater Noida Metro Rail Project

9.20 Government of India has approved Noida-Greater Noida Metro Rail Project in June 2017 for a total route length of 29.707 km at a completion cost of Rs. 5,503 crores. The stretch of 29.707 km consisting of 21 Metro Stations connecting Noida and Greater Noida from Sector 51 to Greater Noida Depot. The entire corridor has been inaugurated jointly by Hon’ble Chief Minister, Uttar Pradesh, Shri Yogi Adityanath and Hon’ble Minister of State (Independent charge), Housing and Urban Affairs, Government of India, Shri Hardeep Singh Puri on 25.01.2019. The implementing agency of this project is Noida Metro Rail Corporation Limited (NMRC).

Inauguration of Noida-Greater Noida Metro corridor on 25.01.2019 by Hon’ble Minister of State (Independent charge), Housing and Urban Affairs, Government of India, Shri Hardeep Singh Puri and Hon’ble Chief Minister, Uttar Pradesh Shri Yogi Adityanath.
Bhopal Metro Rail Project

9.21 The Bhopal Metro Rail Project has been sanctioned by the Government of India on 30.11.2018. It consists of 27.87 km of network length divided into two corridors i.e. from Karond Circle to AIIMS (14.99 km) and Bhadbhada Square to Ratnagiri Tiraha (12.88 km). The approved completion cost is Rs. 6,941.40 crores. The Financial progress of the project as on 28.02.2019 is 0.33%. Physical progress of the project includes awarding civil tender for 6.225 km elevated viaduct on 01.11.2018.

Indore Metro Rail Project

9.22 The Indore Metro Rail Project has been sanctioned by the Government of India on 30.11.2018. It consists of one corridor of network length 31.55 km from Bengali Square – Vijay Nagar – Bhawarsala – Airport – Palasia – Bengali Square (Ring line). The approved completion cost is Rs. 7,500.80 crores. The Financial progress of the project as on 28.02.2019 is 0.30%. Physical progress of the project includes awarding civil tender for 5.29 km elevated viaduct on 1.11.2018.

Patna Metro Rail Project

9.23 The Patna Metro Rail Project has been approved by Government of India on 13.02.2019. It consists of network length of 31.39 km (15.38 km elevated, 15.75 km underground & 0.26 km at grade) divided into two corridors i.e. from Danapur to Mithapur (16.94 km) and Patna Railway Station to New ISBT (14.45 Km) with 24 stations. The approved completion cost is Rs. 13,365.77 crores. The Foundation Stone for the Patna Metro Rail Project was laid by Hon’ble Prime Minister on 17.02.2019.

Hon’ble Prime Minister, Shri Narendra Modi laid the Foundation Stone for Patna Metro Rail Project on 17.02.2019 in the presence of Hon’ble Chief Minister of Bihar, Shri Nitish Kumar.
**Agra Metro Rail Project**

9.24 The Agra Metro Rail Project has been approved by Government of India on 28.02.2019. It comprises of two corridors of total length 29.4 Km, (i) Sikandara to Taj East Gate (14.0 Km) and (ii) Agra Cantt to KalindiVihar (15.4 Km). The total completion cost of the project is Rs. 8379.62 crore. The financing of the Agra Metro Rail Project will be partly from Government of India and Government of Uttar Pradesh on equal equity basis and partly as soft loan from Bilateral/Multilateral international funding agency/agencies.

**Kanpur Metro Rail Project**

9.25 The Kanpur Metro Rail Project has been approved by Government of India on 28.02.2019. It comprises of two corridors of total length 32.385 Km, (i) IIT, Kanpur to Naubasta (23.785 Km) and (ii) Agriculture University to Barra 8 (8.600 Km) . The total completion cost of the project is Rs. 11,076.48 crore. The financing of the Kanpur Metro Rail Project will be partly from Government of India and Government of Uttar Pradesh on equal equity basis and partly as soft loan from Bilateral/Multilateral international funding agency/agencies.

**Surat Metro Rail Project**

9.26 Surat Metro Rail Project consists of two corridors for a total length of 40.35 km viz. Sarthana to Dream city (21.61 km) and Bhesan to Saroli (18.74 km) at a total completion cost of Rs 12,020.32 crore. The project has been approved on 9.3.2019. The project will be implemented within a period of 5 years from the date of approval.

**Regional Rapid Transit System (RRTS) for National Capital Region (NCR)**

9.27 RRTS is a rail-based, high-speed, high-capacity transit system aimed at bringing people and places closer in National Capital Region. Once operational, the smart lines will act as the transportation backbone for the region, while driving balanced and sustainable urban development. Salient features of RRTS are given below:

i. **Design Speed:** 180 kmph; **Operational Speed:** 160 kmph; **Average Speed:** 100 kmph

ii. **Train every 5-10 minutes; serving traffic nodes at every 5-10 kms.**

iii. **Train services will not be affected even during extreme weather conditions.**

iv. **High speed mobility will also create new employment, business and other economic opportunities and will improve quality of life of citizens in NCR.**

v. **RRTS stations will be seamlessly integrated with other transport modes like Airport, Railway Stations, Metro Stations, ISBTs etc. Interoperability among the 3 corridors will provide seamless movement across RRTS corridors without the need to change trains.**
9.28 Eight RRTS corridors were identified to connect various urban nodes in NCR with a high-speed rail-based mass transit system. Out of these, three are prioritized for implementation in Phase 1. The Delhi-Ghaziabad-Meerut corridor is the first RRTS project being implemented in India and will be closely followed by Delhi-Alwar & Delhi-Panipat corridors. The present status of these three prioritized RRTS corridors is as under:

i. Delhi-Ghaziabad-Meerut

9.29 In March, 2019, Government has approved India’s first Regional Rail between Delhi-Ghaziabad-Meerut with Metro in Meerut at estimated project completion cost of Rs 30,274 crores. The 82 km stretch will be covered in less than an hour by safe, reliable, comfortable & green public transit. Hon’ble Prime Minister, Shri Narendra Modi laid the Foundation Stone for this inaugural RRTS corridor on 8th March 2019.

9.30 RRTS trains will reduce pollution and road congestion taking about more than one lakh private vehicles off-road on this corridor alone. Pre-construction activities such as Geo-Technical investigations, Pile Load Tests, Road Widening and Detailed Engineering are already in advance stage and National Capital Region Transport Corporation (NCRTC), the implementing agency for the project is ready to begin construction of the corridor.

ii. Delhi-Alwar RRTS Corridor

9.31 The Detailed Project Report (DPR) for Phase-I of Delhi-Alwar corridor i.e. Sarai Kale Khan (SKK) (Delhi) –Gurugram - SNB (Shahjahanpur-Neemrana-Behror) RRTS Corridor has been finalized by NCRTC. The DPR of SKK-SNB RRTS Corridor has been approved by the Board of Directors of NCRTC and by the Government of Haryana in December, 2018 and February, 2019 respectively. The approval of Government of NCT of Delhi and Government of Rajasthan is awaited.

9.32 In order to ensure minimum private land acquisition, corridor is planned mainly in Government non-agricultural land. The total estimated completion cost of the project of Phase-I SKK-SNB is about Rs. 37,185 crores. Pre-construction activities such as Geo technical investigation, Pile Load test, Drone Survey, Utility identification etc. are already in progress.

iii. Delhi-Panipat Corridor

9.33 NCRTC has submitted the proposal for taking RRTS alignment within the RoW of NH-44 as much as possible without sacrificing any functional requirement of NH to the National Highways Authority of India (NHAI) for their approval. The DPR shall be finalized by NCRTC after approval of NHAI.
Urban Transport Planning & Capacity Building Scheme

9.34 This scheme was formulated in August, 2008 for taking up traffic and transportation studies. The scheme covers the wide gamut of urban transport matters for promoting comprehensive and integrated urban transport planning, integrated land use and transport planning, comprehensive mobility plans, preparation of Detailed Project Reports, Clean Development Mechanism, Intelligent Transport System, launching of awareness campaign in line with National Urban Transport Policy, 2006. Under this scheme, the Ministry provides financial assistance up to 80% for taking up Traffic and Transportation Studies, feasibility studies, Comprehensive Mobility Plan (CMP) and 50% for preparation of DPR for Mass Rapid Transport System (MRTS)/Light Rail Transit (LRTS), which are originated by the State Governments/Union Territories/Urban Local Bodies.

World Bank-GEF-UNDP assisted Sustainable Urban Transport Project (SUTP)

9.35 Pursuant to adoption of the National Urban Transport Policy in 2006, the Sustainable Urban Transport project was taken up. The project aimed at developing capacity building in Indian cities and institutions. Six pilot projects were taken up to demonstrate the concept of prioritizing for moving people over moving vehicles. This project of Government of India was aided by World Bank and Global Environment Facility. The project gross outlay was Rs 2194.50 crores.
9.36 Several development initiatives were taken up to improve individual & institution capacity at National, State and City/ULB levels to implement the National Urban Transport Policy. As part of Capacity Building, 4257 participants have been trained so far under this project in various workshops & training programs on urban transport.

9.37 Demonstration Projects were executed in Pimpri Chindwad (Maharashtra), Hubli Dharward (Karnataka), Naya Raipur (Chhattisgarh), Indore (Madya Pradesh) and Mysore (Karnataka).

9.38 The project successfully concluded in March, 2018.

**Efficient and Sustainable City Bus Service (ESCBS) Project**

9.39 Under an agreement between the Ministry of Housing and Urban Affairs and the World Bank in May 2016, this project was taken up in four Indian cities, namely, Chandigarh, Mira-Bhayander, Bhopal and Jaipur. Focus being to enhance the efficacy of the city bus transport infrastructure, improve fleet management, employ Intelligent Transport System and install system to improve fuel efficiency, thereby increasing the attractiveness of Urban Bus transport. The project aims to complement the baseline project i.e. Bus Funding Scheme of Government of India under the National Urban Renewal Mission (NURM) through additional activities that would help realize its full potential. The gross project outlay including contribution of the Government of India, of the states and cities, and the grant from the GEF through World Bank is Rs 570.70 crores and the project is expected to conclude by December, 2019.

**Make in India**

**Developing Eco-System for Metro Gate Validation Terminal by Centre for Development of Advanced Computing (CDAC) and National Common Mobility Card (NCMC) model to enable seamless travel by National Payments Corporation of India (NPCI), Mumbai.**

9.40 The Ministry of Housing and Urban Affairs (MoHUA) has come out with a National Common Mobility Card (NCMC) model to enable seamless travel by different metros and other transport means across the country besides retail shopping and purchases considering following major issues:

- Single card can be used for all financial transaction (either retail or transit or other merchant)
- Vendor lock-in (in Transit eco-system) should be removed
- Availability of components/resources from local vendors/manufacturers
- To reduce Capital and Operation/Maintenance cost

9.41 The Interface Specifications of NCMC Ecosystem were drawn by CDAC and NPCI. NPCI has defined the card specification (qSparc) including Card- Validation Terminal Interface
and CDAC has defined the interface specifications of Automated Fare Collection Systems (AFCS) which comprises various parts as Validation Terminal-Mechanical Gate Interface, Validation Terminal-AFC Interface, AFC-Bank (acquirer) Interface. CDAC & NPCI are in final stage of developing commercially deployable solution of complete NCMC eco-system.

11th Annual Urban Mobility India Conference cum Exhibition 2018

9.42  The Urban Mobility India (UMI) Conference and Expo is an annual flagship event of the Ministry of Housing and Urban Affairs, which is organized as per stipulations of National Urban Transport Policy (NUTP-2006). The primary objective of the UMI is to share and disseminate knowledge to the participants and to help them remain up-to-date with best urban transport practices. The event brings together national and international experts, technology and service providers, policy makers, practitioners and officials from the urban transport sector under one roof. The UMI was first organized in the year 2008. The 11th Urban Mobility India conference was held in Nagpur in partnership with the Government of Maharashtra. The theme of the conference was “Green Urban Mobility”. About 800 national and international delegates attended the conference.
Central Public Health and Environmental Engineering Organisation (CPHEEO)

10.01 Water supply and sanitation including Solid Waste Management is a State subject and the State Governments/Union Territories and Urban Local Bodies are responsible for providing the services through planning, design, implementation, operation and maintenance. The Ministry of Housing and Urban Affairs is responsible for formulation of broad policies and programmes and assists State Governments/Union Territories in providing technical guidelines/financial support with respect to Urban Water Supply & Sanitation sector including Municipal Solid Waste.

10.02 CPHEEO is the Technical Wing of the Ministry of Housing and Urban Affairs, Government of India, dealing with the technical matters related to urban water supply and Sanitation including Solid Waste Management (SWM) in the country. CPHEEO plays a vital role in policy formulation and also responsible for technical appraisal of schemes/proposals of State Governments & parastatals where Additional Central Assistance (ACA) (under various programmes of Government of India) and external funding has been sought. CPHEEO renders advice in matters related to its mandate in all projects & missions of the Ministry. It acts as an advisory body at central level to advise the concerned State agencies and Urban Local Bodies (ULBs) in implementation, operation & maintenance of urban water supply, sanitation and SWM projects and helps to adopt latest technologies in these sub sectors.

A. Swachh Bharat Mission

10.03 Ministry of Housing and Urban Affairs (MoHUA), Government of India is implementing Swachh Bharat mission on all Urban Local Bodies since 2nd October, 2014 with objectives to achieve 100% open defection free cities and eradicate manual scavenging. The Mission will be in force till 2nd October, 2019. One of the components is “construction of individual household latrines (IHHL)” including conversion of insanitary and pit latrines into sanitary latrines. Government of India plans to achieve 100% segregation of waste generated so as to enable the processing of solid waste more efficient which may lead to the proper function of Waste to Compost plants in the country.

1) CPHEEO has been coordinating the Mission Directorate of the Ministry in implementation of Swachh Bharat Mission-Urban

2) CPHEEO has been attending meetings of High Powered Committee (HPC) in the States/UTs and provided technical support/guidance for effective implementation.
3) CPHEEO is also actively involved in launch of Swachh Survekshan, 2019. A number of Regional Workshops were undertaken by CPHEEO officers in different cities all over India in order to create awareness about parameters, methodology & weightage on Swachh Survekshan -2019, capacity building activities, e-learning training for Municipal Staff, use of Swachhata App including the engineering Module and strategy to achieve ODF status and timeline.

4) CPHEEO was involved in to conduct Regional workshop and training on Star Rating of Garbage Free Cities under Swachh Bharat Mission (Urban) and covered various Cities/ towns all over the urban area of the country.

5) In addition to the above, CPHEEO has brought out the following Advisories and guidelines on community & public toilets, municipal solid waste management during the implementation of SBM-U;

   i. Advisory on On-Site and Decentralized Composting of Municipal Organic Waste, June 2018.


   vi. Standard Operating Procedure (SOP) for Cleaning of Sewers and Septic Tanks, November 2018.


B. **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)**

10.04 The Government of India is implementing Atal Mission for Rejuvenation and Urban Transformation (AMRUT) with the aim of providing basic civic amenities like water supply, sewerage, urban transport, parks as to improve the quality of life for all especially the poor and the disadvantaged in 500 cities. The focus of the Mission is on infrastructure creation that has a direct link to provision of better services to the citizens. CPHEEO has been attending the meetings of State Level Technical Committee (SLTC) in the States/UTs and Apex Monitoring Committee meeting at the Ministry.
C. **Smart City Mission**

10.05 The objective of the Smart Cities Mission is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of ‘Smart’ Solutions. The Smart Cities Mission of the Government is a bold, new initiative. Application of Smart Solutions will enable cities to use technology, information and data to improve infrastructure and services. Comprehensive development in this way will improve quality of life, create employment and enhance incomes for all, especially the poor and the disadvantaged, leading to inclusive Cities. CPHEEO has been attending the meetings in the cities as Board of Director of SPV.

D. **Manual on Storm Water Drainage**

10.06 CPHEEO is preparing the Manual on Storm Water Drainage Systems which shall be referred by all Urban Local Bodies for designing, maintaining and management of storm water drains. The Manual has to be prepared in three volumes i.e. Part-A: Engineering, Part-B: Management and Part-C: Operation & Maintenance. Ministry has constituted an Expert Committee by adopting members from different Ministries, Technical institutes, representative from Central/ State Governments etc.

E. **Training Programme**

10.07 CPHEEO also sponsors research studies, organizes training courses for the in-service engineers working in the water supply and sanitation sector to keep them abreast with the latest know-how in the field of Public Health / Environmental Engineering.

10.08 The PHE training was started by the Ministry with the objective of providing training to in-service Engineers and Para-Engineering Staff of the various State Public Health Engineering Departments, Water Supply and Sewerage Boards, Urban Local Bodies etc.

The details are as follow:

(i) **Post Graduate Course (M.Tech./ME)**

10.09 Post Graduate Course in Public Health Engineering or Environmental Engineering. The duration of the course is 24 months (4 Semesters).

This training is imparted at the following academic institutions:

(i) All India Institute of Hygiene and Public Health, Kolkata
(ii) VeermataJeejabai Technological Institute, Mumbai
(iii) Anna University, Chennai
(iv) Visvesvaraya National Institute of Technology, Nagpur
(v) Motilal Nehru National Institute of Technology, Allahabad
The duration of the Post Graduate Course is 24 months. Under the programme, Central support is extended to meet the stipend @ Rs. 4000/- per month for 24 months for outstation trainees and tuition & examination fee for all trainees. In addition, contingency grant @ Rs. 2,500/- per semester per candidate for 4 semesters is admissible and staff support for one Professor and one Assistant Professor is also extended to the Institutes.

(ii) **Refresher Course**

10.10 Several Refresher Courses on various specializations are sponsored by the Ministry and conducted through different academic, research & professional institutions and State Departments for the benefit of in-service Engineers & Para-Engineering Staff working in junior, middle & senior levels in various State Public Health Engineering Departments, Water Supply & Sewerage Boards & Urban Local Bodies etc. Financial support in the form of honorarium to lecturers, expenses on field visits, preparation of lecture materials etc. is extended to the institute conducting the training courses. A total of 54 numbers of courses are conducted at various Institute in the country. Some of the major courses are as follows:

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>Water Works Supervisors Course</td>
</tr>
<tr>
<td>ii</td>
<td>Water Supply System Management</td>
</tr>
<tr>
<td>iii</td>
<td>Structural Design on Water Treatment Plants and other Related Structure</td>
</tr>
<tr>
<td>iv.</td>
<td>Preventive Maintenance and Leak Detection in Water Distribution System</td>
</tr>
<tr>
<td>v.</td>
<td>Computer aided design of pipelines and Pipe network for water supply and sewerage systems</td>
</tr>
<tr>
<td>vi</td>
<td>Rain Water Harvesting</td>
</tr>
<tr>
<td>vii</td>
<td>Computer Aided Design of Water Supply &amp; Sewer Network</td>
</tr>
<tr>
<td>viii</td>
<td>Ground Water Treatment of Arsenic, Iron &amp; Fluoride in drinking water</td>
</tr>
<tr>
<td>ix.</td>
<td>Operation and Maintenance of W.S. and Sanitation projects</td>
</tr>
<tr>
<td>x.</td>
<td>Low Cost Techniques for Sanitation, Composting and Waste Water Treatment</td>
</tr>
<tr>
<td>xi.</td>
<td>Water Quality Management</td>
</tr>
</tbody>
</table>
10.11 Other Activities Performed by CPHEEO

(i) Several SFC/EFC/Cabinet Notes and Technical proposals were examined by CPHEEO and comments sent to the concerned Ministries

- Comments on National Material Recycling Policy and Setting up of National Material Recycling Authority by NITI Aayog
- Comments on National Forest Policy, 2018 forwarded by MoEF&CC

(ii) To monitor the implementation of SWM Rules 2016, on behalf of NGT, an APEX Committee has been set up under the Chairmanship of Hon’ble Justice Shri D.K. Jain, Former Justice of Hon’ble Supreme Court of India. CPHEEO is the coordinating the meetings with States, support in making policy by NGT and other supports.

(iii) CPHEEO is also member of High Level Committee of NITI Aayog on Resource Efficiency.

(iv) CPHEEO Senior Officers, during the year, attended several meetings held by NITI Aayog, MoEF&CC, MoWR, RD&GR, MoDWS, MoSJE etc.

(v) Meetings to finalize the National Indicators for Goals 10 & 17 of Sustainable Development Goals (SDGs) during the year were attended by CPHEEO Seniors Officers in NITI Aayog.

(vi) CPHEEO’s Senior Office is deeply involved in Namami Gange Programme of the MoWR, RD&GR for implementation of Mission in cities particularly for solid waste management along the Ganga transportation.

(vii) The status of the Detailed Project Reports appraised for the current year under external funding are as follows:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Project</th>
<th>Funding Agency</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Detailed Project Report (DPR) for Sewerage System of Berhampur Town, Odisha</td>
<td>KfW</td>
<td>Berhampur</td>
<td>Odisha</td>
</tr>
<tr>
<td>2.</td>
<td>Detailed Project Report (DPR) for sewerage network &amp; pumping stations in newly developed residential areas of Bhubaneswar City, Odisha</td>
<td>KfW</td>
<td>Bhubaneswar</td>
<td>Odisha</td>
</tr>
<tr>
<td>3.</td>
<td>Pollution abatement works</td>
<td>Kfw</td>
<td>Haridwar</td>
<td>Uttarakhand</td>
</tr>
<tr>
<td>4.</td>
<td>Detail project report on sewerage scheme for Port Blair, Andaman &amp; Nicobar Island</td>
<td>JICA</td>
<td>Port Blair</td>
<td>Andaman &amp; Nicobar Island</td>
</tr>
</tbody>
</table>
(viii) CPHHEO was part of the delegation for participating in study tour, training and workshop as detailed below:

a) Bilateral Cooperation meeting at Hagen and Stockholm, April 2018.

b) Training on use of RDF in various industry –September 2018- (Germany)

c) 6th Workshop on On-Site Domestic Waste Water Treatment in Asia held on 19th and 20th September, 2018 in Tokyo, Japan.

d) JICA training program in Japan from 7th July to 7th September, 2018

e) Promoting Environmentally Sustainable Smart Cities, Seoul, South Korea, 15-18 October, 2018.

f) Training on Water Management, 25-30 November, 2018 at Colombo Sri Lanka


h) NIUA workshop on Municipal Solid Waste Management at different Cities to certify the effectiveness of workshop.

i) National Consultation on Standardization of Refuse Derived Fuel (RDF) on 6th September, 2018, at NDMC Convection Centre New Delhi.

j) World Toilet Day event on 19th November, 2018 at New Delhi.
11.01 North Eastern Region (NER), as one of the less developed regions in India, is a priority for facilitating investment in infrastructure and services. Given the difficult access to and remoteness of NER, the urban areas in the North Eastern States perform a much higher order function than those of similar size in India. Investments in urban infrastructure and services are the key to unleashing the potential of these towns and cities to catalyze the growth of the NER.

A. 10% Lumpsum Provision Scheme for benefit of North Eastern States including scheme

11.02 The Scheme of 10% Lumpsum Provision for the benefit of North Eastern Region including Sikkim became operational in the Ministry from the Financial Year 2001-02 as per guidelines of Non-Lapsable Central Pool of Resources (NLCPR) and instructions issued by the Ministry. The assistance released from the Pool is tied with the project and no diversion is permissible.

11.03 10% of the Annual Plan Budget of the Ministry is earmarked for implementation of Projects/Schemes for the North-Eastern States including Sikkim.

11.04 So far this Ministry has approved a total of 430 projects estimated at a cost of Rs. 4170 crore, to various states.

11.05 These projects are spread over the eight states, 96 projects in Arunachal Pradesh, 71 projects in Nagaland; 72 projects in Assam; 44 projects in Sikkim; 40 projects in Manipur; 44 projects in Mizoram; 39 projects in Tripura and 24 projects in Meghalaya. Out of these, 299 projects have been completed as reported by the States.

B. North Eastern Region Urban Development Programme (NERUDP)

11.06 The North Eastern Region Urban Development Programme (NERUDP) is being implemented by the Ministry of Housing and Urban Affairs (MHUA) with the financial assistance from Asian Development Bank (ADB). It covers capital cities of 5 North Eastern States viz., Agartala (Tripura), Aizawl (Mizoram), Gangtok (Sikkim) & Kohima (Nagaland) and Shillong (Meghalaya). The projects are being undertaken in three tranches over the period 2009-2019.

11.07 The project covers priority urban services, viz., (i) Water Supply, (ii) Sewerage and Sanitation and (iii) Solid Waste Management and also institutional and financial reforms.

1) Tranche - I

Tranche - I comprises of water supply projects in Aizwal, Kohima, Gangtok and Agartala, and Solid Waste Management projects in Kohima and Shillong. The projects have been completed in all the five cities. Only, O&M under Kohima SWM project is going on. Target date for completion is Jun'2019.
2) Tranche - II

In this Tranche water supply projects in Agartala, Aizawl, Gangtok, and Kohima and SWM projects in Kohima and Shillong have been expanded. Also SWM project in Gangtok, Sewage project in Aizawl, and Septage Management project in Kohima have been included. The projects are now under execution. These projects are targeted for completion by Jun'2019.

3) Tranche - III

Tranche-III commenced in April, 2016. It comprises of water supply, solid waste management, and septage projects in Agartala and Aizawl. The projects are targeted for completion by June, 2019.

Apart from the above, the water supply projects in the above cities include programme for reduction of non-revenue water.

4) Status of implementation Reforms

Accrual Accounting has been implemented in all 5 States.

Tripura: Water Supply function has been transferred to ULB. Unit Area based property tax has been approved. User charges have been levied and decision to move to volumetric charges has been taken.

Mizoram: Unit Area based property tax has been implemented. User charges on volumetric basis have been levied. While many functions including SWM are being performed by the AMC, 8 more functions are yet to be transferred.

Meghalaya: All recommendations are in place. Decision of the State on implementation of property tax, user charges, etc., is awaited.

Nagaland: User charges for SWM have been implemented. Decision of the State on all other reforms including property tax is awaited.

Sikkim: Property tax and user charges are yet to be implemented. SWM user charges are already being collected by GMC. Transfer of functions to GMC approved by the Govt.

5) Investment Programme Coordination Cell (IPCC) & Programme Management and Monitoring Consultants (PMMC) in MHUA

The IPCC and PMMC Consultancy firm continued to monitor progress of project execution under the three Tranches and assist the States in project execution.
12.01 As per Article 239AA of the Constitution of India, the Union territory of Delhi shall be called the National Capital Territory (NCT) of Delhi. NCT has a Legislative Assembly which has the power to make laws for the whole or any part of the National Capital Territory with respect to any of the matters enumerated in the State List or in the Concurrent List except with respect to Entries 1, 2, 18 of the State List and the Entries 64, 65 and 66 of that List in so far as they relate to the said Entries 1, 2 and 18. Entry 18 of the State List pertains to land, that is to say, right in or over land, land tenure including relation of landlord and tenant, and the collection of rents, transfer and alienation of agricultural land; land improvement and agricultural loans and colonization.

Amendment to the Master Plan for Delhi-2021

12.02 Amendments to the Master Plan for Delhi-2021 have been notified on 21.06.2018, to revise the Development Control Norms for Shop-cum Residential Plots and Godown clusters existing in non-conforming areas. These amendments have paved way for regularization of the misuse of premises and unauthorized constructions in eligible cases by providing for additional FAR in eligible cases while at the same time taking care of issue such as parking spaces, accessibility to fire services, infrastructure requirements and convenience of inhabitants.

Rationalization of Use Conversion Charges

12.03 The Use Conversion Charges (UCC) were substantially reduced on 29.12.2017, from Rs. 89,094/- per sqm. to Rs. 22,274/- per sqm. of built up area for upper residential floors of various markets like Sarojini Nagar Market, Khan Market and Green Park Extension, etc. These rates were further rationalized on 29.06.2018, for upper floors of LSC/CSC based on category of colonies taking the rate of Rs. 22,274 for A & B, Rs. 14,839 for C & D and Rs. 5,576 for E, F, G & H. These rates are valid till 28.06.2019.

Constitution of Special Task Force

12.04 To address the problems of illegal constructions and encroachments on public lands, parking spaces, roads, pavements, etc., an STF under the chairmanship of Vice Chairman, DDA with Municipal Commissioners of the three MCDs, Chairperson NDMC, representatives of GNCTD, Delhi Police, Delhi Fire Service, ASI etc., as members, has been constituted by MoHUA on 25.4.2018. STF is also entrusted with the task of ensuring coordination among various agencies and timely and effective action by such authorities for ensuring compliance with statutory provisions including MPD-2021 and the Unified Building Bye laws. STF has also been notified by DDA under section 5-A of Delhi Development Act, 1957 on 08.03.2019, in order to give it legal sanctity and to declare it as a statutory authority.

12.05 Complaints can be lodged with STF by any person through various means such as Web-link created on the website of DDA, Mobile App 311, posts, e-mail etc. The meetings of
the STF are held every fortnight and the status report on the actions taken is submitted before Hon’ble Supreme Court every 15 days.

**Formulation of Action Plan for Monitoring of all construction activities in Delhi and fixing responsibility for violations etc.**

12.06 As an intention and commitment to check all ongoing/future unauthorized constructions and with a view to weeding out malpractices and corruption in the functioning of developmental and municipal bodies, an Action Plan was formulated by MoHUA on 23.05.2018. As per this plan, based on territorial jurisdiction of local bodies, a Grid of officers has been prepared containing names, telephone numbers etc., of concerned Executive Engineer/equivalent level officer, accountable for all future irregular and unauthorized constructions/violations of MPD-2021, DMC Act, 1957 and Building Bye-laws etc., in their respective areas. The plan also specifies the action to be taken against instances of past illegal/ unauthorized constructions. Besides taking punitive action under disciplinary rules including suspension, action under the Prevention of Corruption Act would be initiated against erring officers. It is for the first time such drastic measures against officials found negligent, remiss or compliant in these malpractices have been formulated to ensure that illegal/unauthorized construction in Delhi do not take place.

**Private Land Policy**

12.07 A policy for 'planned development of privately-owned land' was finalized and circulated by DDA on 04.07.2018. The policy enables the private land owners to develop their land holdings in conformity to the land use as per prevailing Master Plan / Zonal Development Plan / approved layout plan / surrounding scheme with existing development control norms.

**Land Pooling Policy**

12.08 The land pooling policy, which basically aims at providing affordable housing to the residents of Delhi, was notified by the Ministry on 11th October, 2018 and the regulations to implement the policy were notified by DDA on 24th October, 2018.

12.09 As per the policy Government/DDA will act as a facilitator with minimum intervention to facilitate and speed up integrated planned development. A land owner, or a group of land owners (who have grouped together of their own volition/will for this purpose) or a developer to be referred to as 'Developer Entity' (DE) shall be permitted to pool land for unified planning, servicing and subdivision/share of land for development as per prescribed norms and guidelines.

12.10 The Policy is applicable in the urbanizable areas of urban extension of Delhi, comprising of 95 villages falling in Zones J, K-I, L, N and P-II. A minimum of 70% contiguous land of the sector is required to be pooled and on completion of verification of revenue records, DDA will issue a Notice to constituent land owners of the sector, to form a single entity called the Consortium. Under the policy provisions, the Consortium formed will be required to prepare an Implementation Plan in consultation with all constituent landowner and sign a formal contract agreement amongst them before applying to DDA as a single entity for taking up development within the sector.
12.11 The pooled land will be returned on 60:40 basis - the Consortium will retain 60% of pooled land and hold the remaining 40% on behalf of DDA. Consortium can utilize 60% of pooled land for development of residential, commercial, public and semi-public facilities as per the policy and MPD-2021 provisions. The remaining 40% of the pooled land is to be surrendered, free of encumbrances, as and when required to DDA/service providing agencies to undertake developmental work. Provision for achieving a vertical mix of uses (residential, commercial, PSP) at building level has been introduced. The policy allows an FAR of 200 for group housing/residential use, taking into consideration the availability of resources and services. It is expected to generate about 17 Lakh dwelling units to house about 76 lakh people. In order to promote affordable and inclusive housing, FAR of 15% over and above maximum permissible residential FAR has also been allowed for EWS/affordable housing. Out of total 17 lakhs dwelling units, more than 05 lakh dwelling units will be for the economically weaker sections of the society.

12.12 The new developments under the policy shall comply with the mandatory green building norms as prescribed in the MPD and building byelaws by incorporating principles like dual pipeline, maximum use of recycled water for non-potable purposes, conservation of rain water, zero waste technology etc. Minimum 10% of all energy consumption shall be through solar power or through other renewable energy sources.

12.13 Keeping in line with the goal of 'Ease of Doing Business', the entire process of development by Developer Entities/Consortia will be done in a time bound manner through the Single Window System launched by DDA.

Projects in Delhi funded through Urban Development Fund (UDF)

12.14 The following projects were completed during the year 2018-19:

- Construction of flyover passes between Northern Mahipalpur by pass road and Airport road near Hanuman Mandir, New Delhi - Foundation stone of the Project has been laid by Hon'ble MoS(I/C), HUA on 23.01.2018 and the project has been completed and Inaugurated by Hon'ble MoS (I/C), HUA on 28.02.2019.

- Construction of skywalk and FOB at the Junction of Sikandra Road, Mathura Road, Tilak Marg and Bahadur Shah Marg at ‘W’ Point near Hans Bhawan - Foundation stone laid on 09.11.2017 by Hon'ble MoS (I/C), HUA and the project has already been inaugurated and open for public by Hon'ble MoS (I/C), HUA on 15.10.2018.

- Construction of Grade Separator at Rani Jhansi Road - Inaugurated by Hon'ble MoS (I/C), HUA on 16.10.2018.

12.15 The following projects for Delhi with a UDF funding worth Rs. 509.57 crores were sanctioned during 2018-19:

(i) Solid Waste Management in Delhi (Rs. 216.42 Crore (NrDMC - Rs. 65.93 crore, EDMC - Rs. 70.87 Crore and SDMC - Rs. 79.62 Crore as grants))

Project Cost Rs. 300/ 280/ Now Rs. 236.33 Crore. (Approved by the PSC on 05.07.2018)
UDF Funding: Rs. 216.42 Crore (NrDMC - Rs. 65.93 crore, EDMC - Rs. 70.87 Crore and SDMC - Rs. 79.62 Crore as grants)
Date of Sanction : 06.08.2018
Implementing Agency: all MCDs

(ii) Upgradation of District Centre at Nehru Place:

Project Cost: Rs. 162.79 Crore
UDF Funding: Rs. 130.23 Crore (80% of the project cost)
DDA Funding: Rs. 32.56 Crore (20% of the project cost)
Date of Sanction : 06.08.2018

(iii) Upgradation of District Centre at Bhikaji Cama Place, New Delhi:

Project Cost : Rs. 72.54 Crore
UDF Funding : Rs. 58.03 Crore (80% of the project cost)
DDA Funding : Rs. 14.51 Crore (20% of the project cost)
Date of Sanction : 06.08.2018

(iv) Appointment of IIT Delhi as Monitoring Agency for the work Rehabilitation of Peripheral Sewer Lines in Delhi (Packages 5,6 & 7):

Project Cost : Rs. 4.71 Crore
UDF Funding : Rs. 3.71 Crore
DJB Funding : Rs. 1.00 Crore
Date of Sanction : 28.01.2019

(v) Construction of Foot Over Bridge in Lieu of RUB at Level Crossing No. 4-C on the approach of Patel Nagar Station Delhi:

Project Cost : Rs. 7.15 crore
UDF Funding : Rs. 5.72 crore (80% of the project cost)
MPLAD Funding (Ms, Meenakshi Lekhi) : Rs. 1.43 crore
Date of Sanction : 28.01.2019

(vi) Construction of outfall drain from junction of Sector 31, 32, 26 and 24 to supplementary drain, Rohini:

Project Cost : Rs. 119.32 crore
UDF Funding : Rs. 95.46 (80% of the project cost)
DDA Funding : Rs. 23.86 crore
Date of Sanction: 28.01.2019
13.01 A globalized world has made it imperative to transcend beyond borders and collaborate with the other countries for addressing the contemporary challenges of Urban Development issues. India's cooperation with other countries in the areas of sustainable urban development is a step leading to cross learning and arriving at practical solutions. Ministry of Housing and Urban Affairs has signed Memorandum of Understanding (MoU) with countries like Netherlands, Japan, Germany, France, Sweden, UK, Denmark, Singapore, European Union, Morocco, Saudi Arabia etc. The Joint Working Groups (JWG) constituted under the MoUs hold regular meetings to discuss issues of mutual importance. Exposure field visits are undertaken to one another's countries, as a part of our international collaboration in the field of Sustainable Urban Development. Following are the highlights of the events under International Cooperation (IC) Section:

**Agreement between India and France**

13.02 An Agreement between the Ministry of Housing and Urban Affairs (MoHUA), Government of Republic of India and Ministry for Ecological and Solidary Transition and the Ministry of Territory Cohesion, the Government of the French Republic on Technical Cooperation in the field of Sustainable Urban Development was renewed on 10th March, 2018. The Cabinet in its meeting held on 6th June, 2018 approved the same. Thirteen meeting of the JWG have been held so far. The 14th meeting of the India-France JWG held on 30-31 Jan, 2019. A Joint Action Plan was signed at the JWG meeting which will strengthen bilateral Cooperation between both countries in the areas of water, waste management, affordable housing smart cities and urban mobility.

**MoU between India and Denmark**

13.03 Memorandum of Understanding (MoU) between MoHUA, Government of Republic of India and the Ministry of Industry, Business and Financial Affairs, Government of the Kingdom of Denmark on Technical Cooperation in the field of Sustainable and Smart Urban Development was signed on 16 April, 2018. The Cabinet in its meeting held on 6 June, 2018 approved the same.

13.04 The 1st meeting of the Indo-Danish Joint Working Group (JWG) took place in Copenhagen, Denmark during 21-23 November, 2018. A 4-membered Indian delegation led by Shri Durga Shanker Mishra, Secretary, MoHUA participated in the JWG meeting. Productive discussions were held on promoting cooperation in the field of Sustainable Development including sustainable smart cities, city to city cooperation and cooperation on Urban Water Management etc. As a deliverable, an MoU was signed & exchanged with Denmark side on the sidelines of Vibrant Gujarat Summit in January, 2019 in presence of the Hon’ble PM, to support the establishment of an Urban Living Lab in Goa for Capacity Building solution to smart cities in India.
MoU between India and Netherlands

13.05 The MoU between MoHUA, the Government of India and the Ministry of the Interior and Kingdom Relations, the Government of the Netherlands on Technical Cooperation in the field of Spatial Planning, Water Management and Mobility Management was renewed on 11 April, 2018.

13.06 The Cabinet in its meeting held on 6 June, 2018 approved the same. The 3rd meeting of the JWG was held during 30 April- 2 May, 2018 in The Hague, Netherlands. The JWG meeting was led by Shri Durga Shankar Mishra, Secretary, MoHUA along with a 3 member delegation from the Indian side. A Joint Action Plan covering cooperation in the areas/field of spatial planning, smart cities, affordable housing and waste management was finalized at the meeting and action is underway.

MoU between India and United Kingdom

13.07 MoU between MoHUA, Government of Republic of India and the Government of United Kingdom of Great Britain and Northern Ireland, on Technical Cooperation in the field of Sustainable Urban Development was signed on 17 April, 2018. The Cabinet in its meeting held on 6 June, 2018 approved the same.

Joint Working Group between India and Sweden

13.08 MoU with Sweden was signed in the year 2015 for cooperation in the areas/field of Sustainable Urban Development. The 2nd Indo-Swedish JWG was held in Sweden during 2-4 May, 2018. A 4-member Indian delegation led by Shri Durga Shanker Mishra, Secretary (MoHUA) participated in the JWG meeting. The JWG meeting focused on Smart Cities Planning and Development, Waste management, Waste to Energy Production, Urban Mobility, Sustainable transportation and Training and Capacity Building.

MoU between India and Saudi Arabia

13.09 MoU with Saudi Arabia on technical cooperation in the field of Housing was signed on 20 February, 2019. The Cabinet in its meeting held on 27 March, 2019 approved the same.

MoU between India and Morocco

13.10 MoU with Morocco on technical cooperation in field of Housing and Human settlement was signed on 18 February, 2019. The Cabinet in its meeting held on 27 March, 2019 approved the same.

13.11 Apart from the JWG meetings, meetings with delegations from USA, Germany, Spain, Zimbabwe, Sweden, Japan, Canada, UK, Belgium, France, Norway, Australia, European Union etc. were held in the Ministry to strengthen the bilateral relations in the areas of Sustainable Urban Development.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Country</th>
<th>Leader of Delegation</th>
<th>Meeting Date</th>
<th>Meeting with</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Canada</td>
<td>Mr. Stephen Harper, Former Prime Minister of Canada</td>
<td>17.01.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>2</td>
<td>Japan</td>
<td>Mr. Kenji Hiramatsu, Ambassador of Japan to India</td>
<td>16.02.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>3</td>
<td>UN</td>
<td>Mr. Erik Solheim, Under-Secretary- General of the United Nations &amp; Executive Director of UN Environment</td>
<td>20.02.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>4</td>
<td>Canada</td>
<td>Mr. Amarjeet Sohi, Minister of Infrastructure &amp; Communities</td>
<td>22.02.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>5</td>
<td>Spain</td>
<td>Mr. Jose Luis Kaiser, Director General of International Trade and Investments, Ministry of Economy Industry and Competitiveness</td>
<td>23.02.2018</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>6</td>
<td>UK</td>
<td>Mr. Gavin McGillivray, Minister Counsellor, Development Head, DFID, UK</td>
<td>06.03.2018</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>7</td>
<td>UK</td>
<td>Sir Dominic Asquith, British High Commissioner to India</td>
<td>07.03.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>8</td>
<td>Belgium</td>
<td>Mr. Jan Luykx, Ambassador of Belgium to India</td>
<td>07.03.2018</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>9</td>
<td>France</td>
<td>Mrs. Elisabeth Borne, Minister for Transport, France</td>
<td>10.03.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>10</td>
<td>China</td>
<td>Journalists/Editors from China</td>
<td>03.04.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>11</td>
<td>Japan</td>
<td>Mr. Kenji Hiramatsu, Ambassador of Japan to India</td>
<td>13.04.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>12</td>
<td>Norway</td>
<td>Mr. Nikolai Astrup, Minister of International Development, Norway</td>
<td>27.06.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>13</td>
<td>Australia</td>
<td>Ms. Linda Dessau AC, Governor of Victoria</td>
<td>28.09.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>14</td>
<td>Canada</td>
<td>Mr. Andrew Scheer, Leader of Majesty's Loyal Opposition and Leader of the Conservative Party of Canada</td>
<td>08.10.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td></td>
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<td>---</td>
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<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>15.</td>
<td>USA</td>
<td>Mr. Sylvester Turner, City of Houston Mayor, Texas, USA</td>
<td>13.11.2018</td>
<td>Hon'ble HUAM</td>
</tr>
<tr>
<td>16.</td>
<td>Germany</td>
<td>Prof. Dr. Joachim Nagel, Member of the Executive Board, KWF, Germany</td>
<td>12.11.2018</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>17.</td>
<td>Germany</td>
<td>Dr. Wolfman Klein, Head of South Asia Division, Federal Ministry for Economics, Cooperation and Development (BMZ)</td>
<td>27.11.2018</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>18.</td>
<td>Denmark</td>
<td>Mr. Peter Taksøe-Jensen, Ambassador of Denmark to India</td>
<td>17.12.2018</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>19.</td>
<td>Spain</td>
<td>Ms Ramos Reza, Director General International Trade and Investment, Ministry of Industry, Commerce and Tourism of Spain</td>
<td>09.01.2019</td>
<td>Secretary (HUA)</td>
</tr>
<tr>
<td>20.</td>
<td>Zimbabwe</td>
<td>Dr. Vincent Hungwe, Chairman of Public Service Commission of the Republic of Zimbabwe</td>
<td>14.03.2019</td>
<td>Secretary (HUA)</td>
</tr>
</tbody>
</table>
14.01 Central Public Works Department, an attached office of Ministry of Housing and Urban Affairs is a Principal Engineering Organization of Government of India, which provides services from Project concept to completion and maintenance management in the post construction stage. CPWD is a total Service Provider, capable of giving single window service for all facets of built environment with complete accountability and responsibility.

14.02 CPWD is an organization with large bank of Engineering, Architectural and Horticulture human resources, which renders most comprehensive services in the field of planning, designing, construction and maintenance management for all Building & Infrastructure projects with Total Quality Assurance. CPWD handles wide range of projects pertaining to Housing, Office space, Hospitals, Educational Institutions, Roads, National Highways, Bridges, Flyovers, Airports, Tourism and Culture, Environmental and other utility services. It also executes Border Fencing, Flood lighting and Road projects in difficult terrain under hostile conditions along our borders.

14.03 CPWD operates through wide network available pan India through regions, sub-regions, zones, circles, divisions, subdivisions and sections. Divisions are the main executing units of the Department. Thrust has been given to execute important and time bound projects in a project mode to address the specific requirements of the clients and to pay exclusive attention to the projects.

14.04 The activities of the CPWD have grown steadily over the years. The department has participated very actively in the national development process and have contributed to virtually all sectors of development. It has been able to maintain itself in a robust state of health and continue to contribute to the development of the Nation in a very significant manner.

Functions

14.05 Major Functions of CPWD are Construction and Maintenance. Construction works are of various kinds: e.g. Buildings of various kinds - Residential, Office, Schools, Laboratories, Hospitals, Stadia, Gymnasia and Auditoria, Storages etc. and non-Building Infrastructure works - highways, flyovers, tunnels, bridges, jetties, sports facilities, border fencing, airports, runways etc.

14.06 CPWD maintains a very large building stock of General Pool Residential Accommodation and Central Government Buildings. The approximate number of General
Pool residential units maintained by CPWD is more than one lakh fifty thousand units and General Pool office area maintained by CPWD is more than 22 lakhs square metres.

14.07 It is also involved in discharge of other multiple functions e.g. Technical Advice to Government, Custody of Estates, Valuation, Rent Assessment, Standardization and Benchmarking of construction activities through issue of Schedule of Rates, Specifications etc., processing of DPRs for Border Works and other ministries for centrally funded works. CPWD also assists in organizing Public and Ceremonial Functions, and upkeep of Historical and Important Monuments, Structures and Samadhis etc.

**Vision and Mission of CPWD**

14.08 To create and maintain a sustainable and inclusive built environment within the available resources while ensuring world class quality.

14.09 CPWD envisages a lead role for itself in the execution, maintenance and standardization of the built environment in India, while continuing to play the role of a government department in facilitating the implementation of policies for sustainable development and transparency in governance along with assimilation of knowledge and experience. CPWD will strive to educate its clients to aspire for green buildings and develop norms for the same.

**Setup of CPWD**

14.10 Central Public Works Department is headed by Director General who is also the Principal Technical Advisor to the Government of India. Jurisdiction of the Department is divided into Project Regions and Regions.

**Cadres in CPWD**

14.11 CPWD has three organized Group ‘A’ Services which are controlled by the Ministry of Housing and Urban Affairs. These are Central Engineering Service (Civil), Central Electrical and Mechanical Service and Central Architects Service.

14.12 There are also a few Group 'A' posts in the Horticulture Cadre. There are Group 'B' & 'C' subordinate services for Engineers, Architects, Horticulturist, Ministerial staff, Engineering Drawing Staff, Stenographers and Rajbhasha staff (Official Language).

14.13 CPWD also has a large strength of workmen in various categories and this cadre is called Work Charged cadre.

14.14 To ensure that the accounts of CPWD are seamless with the accounts of the Government, Director (Finance), Accountants and Financial Officers drawn from cadre controlled by Controller General of Accounts, Government of India are posted in different units of CPWD.
14.15 Similarly, for administrative functions, Ministerial staff from Central Secretariat Service Cadre, Central Rajbhasha (Official Language) cadre and a Law Officer from the cadre of Ministry of Law & Justice are posted in Central Office and in most Zonal Offices. A contingent from NIC cadre also assists in IT related functions. Officers drawn from the Ministry of Labour are posted to various field locations for Labour Welfare functions.

14.16 CPWD cadres, both technical and non-technical, are encadred in various organizations such as Delhi PWD, Income Tax Department and Ministry of Environment & Forest etc. In addition to this, many CPWD personnel are deployed on deputation to a host of Government Ministries / Departments, autonomous and public sector entities.

At present, CPWD has 1283 Group A Officers, 6472 Group B Officers and 16422 Group C Staff including work-charge staff. Total present strength of CPWD is 24177.

Functional units

14.17 The basic unit of execution of work is the Division which is further divided into Sub-divisions and Sections which are headed by Executive Engineer, Assistant Engineer/Assistant Executive Engineer and Junior Engineer respectively.

14.18 One or more Division(s) are placed under the control of a Circle headed by Superintending Engineer, similarly, in the revised setup, Divisions have been placed under the control of a Zone headed by a Chief Engineer.

14.19 A Project Unit consists of Executive Engineers of one or more streams and headed by Superintending Engineer or Chief Engineer of either stream. On the Architecture side, the basic unit of Planning may be either Architect or Senior Architect and one or more Senior Architect Units are placed under the control of a Chief Architect.

Specialized Units of CPWD

14.20 **Design and Disaster Mitigation Unit (D&DM)**: A specialized unit of CPWD, is involved in the field of structural design, new construction techniques, materials testing, soil investigations, repairs and rehabilitation of structure in distress, development of software etc. The unit is also actively involved in Disaster Management and Mitigation activities of NDMA. CE (D&DM) acts as Nodal Officer on behalf of MoHUA.

14.21 **Contract, Specifications and Quality Assurance (CSQ) Civil unit**

- Contract and Manual Unit: This unit is responsible for registration and revalidation of contractors, updating of CPWD manual. This unit also issues Technical Circulars in respect of Contracts, Manuals and Delegation of Powers to various officers of CPWD.
• **Quality Assurance Unit:** This unit is responsible for conducting inspection of various construction and maintenance works, issue of Inspection reports for assurance of quality in the works. Regular inspections of major works are carried out by this unit.

• **Techno-Legal Cell:** This unit is responsible for dealing with the Arbitration cases, Court cases, and approval of counter statement of facts in the Arbitration cases, other litigation matters and issue of circulars regarding all the above activities.

• **Technology Application & Specifications Unit:** This unit is responsible for updating the Specifications of works, issue of circulars from time to time, laying down specifications for new materials, approval of Cost Index, revision and updating of schedule of rates etc.

14.22 **Contract, Specifications and Quality Assurance (CSQ) Electrical unit:** This unit is responsible for implementation of Energy Efficiency Measures of the Govt. Buildings maintained by CPWD, framing of Enlistment Rules for Category-Lifts, Class-A, review of Enlistment Rules, preparation of DSR & AOR (E&M), DSR & AOR of Wet Riser System. CPWD General Specifications for Electrical Works, Automatic Fire Alarm System etc.

14.23 **e-Governance Unit:** It is engaged to achieve transparency, accountability and simplification of work-processes in functioning of CPWD. CPWD has taken numerous e-governance initiatives in-house to be in line with Digital India Program of Government of India. Many web-based applications have been designed and developed with in-house expertise which are being used extensively.

14.24 **National CPWD Academy and Regional Training Institutes:** CPWD has its main Training Academy at Ghaziabad and regional Training Institutes and Workmen Training Centres at Delhi, Mumbai, Kolkata, Chennai and Guwahati. These Institutes conduct number of courses for officers and staff of all disciplines. The training programs of the Institute include foundation courses for direct recruit officers, orientation program for newly promoted officers and other staff etc. and in-service training to officers at different stages.

14.25 **Vigilance Unit:** It is responsible for maintaining probity, integrity and efficiency in the organization under the general superintendence of Central Vigilance Commission. The Vigilance Unit in CPWD is headed by the Chief Vigilance Officer who is of the rank of Joint Secretary to Government of India from the Central Staffing Scheme. The Vigilance Unit in the Directorate has 4 separate branches headed by SE rank officers for conducting investigations of vigilance complaints and Departmental proceedings. To conduct vigilance investigations 17 EE rank and 20 AE rank officers are posted in the vigilance unit. In addition to the vigilance set-up in the Head Quarters, the CVO is assisted in the field by Deputy Chief Vigilance Officers' of the rank of SE's posted in all regional offices of CPWD, who act as nodal officers in monitoring the vigilance related complaints & inquiries in their respective regions.
14.26 Performance Highlights

i. A special campaign has been launched by the vigilance unit of CPWD and all out efforts have been made to expedite the investigations and dispose of old pending complaints. As a result, a record number of 468 complaints were disposed of in the year 2018 after completing all actions.

ii. 58 new complaints have been taken up for detailed investigations and 84 detailed investigations have been completed. This year 405 (Upto 31/03/2019) complaints were registered and taken up for investigation.

iii. Quick disposal of disciplinary proceedings resulted in issuing of final orders of Major Penalty orders to 31 CPWD officers and Minor penalty orders to 52 CPWD officers of various levels were issued. 17 CPWD officers were issued Caution memos.

iv. Major penalty inquiry proceedings were instituted against 33 CPWD officers and minor penalty charge sheets were issued to 43 CPWD officers.

v. 1 CTE type, 1 sudden type and 7 Regular type inspections were conducted by the Vigilance Unit during the year and inspection notes were issued detailing observations made during inspections.

vi. Sample checks of e-Tendering, e-procurement, e-payment, e-project management which were already in operation in CPWD have been conducted with the idea to make these processes more effective, corruption free and transparent.

vii. The updated vigilance web page in the CPWD Website, is facilitating the general public to register their vigilance complaints online and also to monitor the progress of action taken on these complaints. This web page also provides details about various activities undertaken by the vigilance unit. The facility of online registration of complaints has become very popular and this year a total of 426 complaints were registered online. By taking quick actions 375 online complaints were disposed off.

viii. Vigilance News Letter "Satarkata Nirman Prakash" is being published regularly. Vigilance unit also conducted various seminars and training programmes for the employees of CPWD to create a conducive and sustainable environment for the vigilance.

ix. Random examination of Audit Paras, Quality Control Reports, Annual Property Returns/Service Records and LTC claims/medical claims and all types of financial claims as a part of effective Preventive Vigilance mechanism.

x. With a view to bring in permanent improvements in the working processes and to increase the efficiency, productivity of the organization, the vigilance unit has recommended 11 major systemic improvements this year.
Work Performance of CPWD

14.27 Actual Work Load of CPWD for the year 2018-19 (Figures in crores)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description</th>
<th>Construction i/c Deposit work</th>
<th>Maintenance i/c Deposit work</th>
<th>Total Financial Terms</th>
<th>Total work Load in Equivalent Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Actual expenditure during January’ 2018 to March 2019</td>
<td>13361.24</td>
<td>2960.36</td>
<td>16321.60</td>
<td>20022.05</td>
</tr>
</tbody>
</table>

Works Completed

14.28 Some of the major works completed and inaugurated by the VVIPs are as under.

- **Dr. B. R. Ambedkar Memorial, New Delhi**

  ![Hon'ble Prime Minister of India inaugurated Dr. Ambedkar National Memorial, New Delhi on April 13, 2018](image1)

- **Western Court Hostel Annexe, New Delhi**

  ![Hon'ble Prime Minister of India inaugurated Western Court Hostel Annexe, New Delhi on April 4, 2018](image2)
• Development of Samadhi Memorial "SADAIV ATAL" at Rashtriya Smriti Sthal, New Delhi.

Hon'ble President of India dedicated the Samadhi Memorial "SADAIV ATAL" to the Nation on December 25, 2018.

• 'National Salt Satyagraha Memorial' Dandi, Gujarat

Hon'ble Prime Minister of India inaugurated 'National Salt Satyagraha Memorial' Dandi, Gujarat on January 30, 2019

• Super Speciality Block at BRD Medical Collage Gorakhpur, Uttar Pradesh

Hon'ble Prime Minister of India inaugurated the Super Speciality Block constructed by the Central Public Works Department at BRD Medical Collage Gorakhpur, Uttar Pradesh on February 24, 2019
• **Academic and Administrative block for School of Planning and Architecture, Vijayawada**

Hon'ble Vice President of India, Shri M. Venkaiah Naidu inaugurated Academic and Administrative block for School of Planning and Architecture, Vijayawada on August 23, 2018.

• **Central Academy for Police Training, Bhopal**

Shri Rajnath Singh, Hon'ble Home Minster inaugurated Central Academy for Police Training, Bhopal on 31st May 2018

• **Sir Visvesvaraya Kendriya Bhawan, Bengaluru**

Shri Hardeep Singh Puri, Hon'ble Minister, Ministry of Housing and Urban Affairs inaugurated Sir Visvesvaraya Kendriya Bhawan, Bengaluru on March 11, 2018
Shri Hardeep S. Puri, Hon’ble MoS, Ministry of Housing & Urban Affairs, inaugurated newly constructed Flyover and Underpass between Northern Mahipalpur Bypass Road and Airport Road Delhi on 28th February 2019.

• Dynamic facade lighting in heritage and Monumental Buildings in Varanasi.

Monumental Buildings in Varanasi

• Some other completed buildings

Aykar Bhawan at Vejalpur, Ahmedabad

Academic Building, IIT Ropar
14.29 Other completed Projects during 2018-19 costing more than 25 crores

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of Work</th>
<th>Location</th>
<th>Zone</th>
<th>A/A &amp; E/S Amount (in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction of Annexe building of NABARD.</td>
<td>Chandigarh</td>
<td>NZ-I</td>
<td>28.73</td>
</tr>
<tr>
<td>2</td>
<td>Construction of 300 seater multi-purpose Boys Hostel at NIT Kurukshetra.</td>
<td>Kurukshetra</td>
<td>NZ-I</td>
<td>50.65</td>
</tr>
<tr>
<td>3</td>
<td>Construction of Permanent Infrastructure at SHQ and Bn. Hqrs</td>
<td>Lakhimpur Kheri</td>
<td>NZ-II</td>
<td>31.59</td>
</tr>
<tr>
<td>4</td>
<td>Construction of Family Qtrs. of 106 Bn. RAF at Jamshedpur.</td>
<td>Jamshedpur</td>
<td>EZ-IV</td>
<td>56.02</td>
</tr>
<tr>
<td>5</td>
<td>Construction of 575 Bedded boys &amp; 150 Bedded Girls Hostel for CIPET at Vatva, Ahmedabad.</td>
<td>Ahmedabad</td>
<td>WZ-IV</td>
<td>34.70</td>
</tr>
<tr>
<td>6</td>
<td>Construction of Office Building for Income Tax Department at Vejalpur, Ahmedabad.</td>
<td>Ahmedabad</td>
<td>WZ-IV</td>
<td>76.00</td>
</tr>
<tr>
<td>7</td>
<td>Development of permanent infrastructure at 65th Bn. Hqr., SSB, Jamnagar.</td>
<td>Jamnagar</td>
<td>WZ-IV</td>
<td>25.56</td>
</tr>
<tr>
<td>8</td>
<td>Construction of Permanent Campus for Indian Institute of Management, Tiruchirappalli.</td>
<td>Trichy</td>
<td>SZ-IV</td>
<td>332.00</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Name of Work</td>
<td>Location</td>
<td>Zone</td>
<td>A/A &amp; E/S Amount (in Crores)</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------</td>
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<td>-----------------------------</td>
</tr>
<tr>
<td>9</td>
<td>Design &amp; Construction of residential quarters for CTC-II, CRPF, Coimbatore.</td>
<td>Coimbatore</td>
<td>SZ-IV</td>
<td>42.19</td>
</tr>
<tr>
<td>10</td>
<td>Kitchen, Dining, Visiting Faculty Bldg. and Institutional Block for SPA, Vijayawada.</td>
<td>Vijayawada</td>
<td>SZ-VI</td>
<td>96.22</td>
</tr>
<tr>
<td>11</td>
<td>Construction of Centenary Super specialty Block in S.S. Hospital, IMS, BHU, Varanasi.</td>
<td>Varanasi</td>
<td>BHU Project Zone</td>
<td>135.76</td>
</tr>
<tr>
<td>12</td>
<td>Construction of Residential Complex for Pt. Madan Mohan Malviya Cancer Centre at BHU, Varanasi.</td>
<td>Varanasi</td>
<td>BHU Project Zone</td>
<td>58.14</td>
</tr>
<tr>
<td>13</td>
<td>Upgradation &amp; Super Speciality Hospital of Lala Lajpat Rai Memorial Medical College, Meerut</td>
<td>Meerut</td>
<td>NZ-II</td>
<td>69.99</td>
</tr>
</tbody>
</table>

**General Pool Office Accommodation completed during the year 2018-19**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Zone</th>
<th>Name of Work</th>
<th>Station</th>
<th>Total Plinth Area (sqm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NZ-V</td>
<td>Construction of GPOA at Surya Enclave Jalandhar.</td>
<td>Jalandhar</td>
<td>3333.00</td>
</tr>
<tr>
<td>2</td>
<td>NZ-II</td>
<td>Construction of GPOA at Allahabad.</td>
<td>Allahabad</td>
<td>5298.84</td>
</tr>
</tbody>
</table>

14.30 **Some of new works for which foundation stone have been laid**

- **Super Specialty Hospital at Bhagalpur, Bihar**

*Hon’ble Prime Minister of India laid foundation stone for construction of Super Specialty Hospital at Bhagalpur, Bihar on February 17, 2019.*

*Super Specialty Hospital at Bhagalpur, Bihar*
• Proposed Redevelopment of Govt. of India Press at Minto Road, New Delhi

Shri Hardeep Singh Puri, Hon’ble Minister, Ministry of Housing and Urban Affairs laid foundation stone for Redevelopment of Government of India Press at Minto Road, New Delhi on April 4, 2018

• Proposed 120 General Pool Residential Flats at Pocket-I, DDU Marg, New Delhi

Shri Hardeep S. Puri, Hon’ble Minister, Ministry of Housing and Urban Affairs laid foundation stone for the work at DDU Marg, New Delhi on October 16, 2018

• Proposed 76 flats for Lok Sabha MPs at Dr. B. D. Marg, New Delhi

Shri Suresh Angadi, Chairman House Committee Lok Sabha performed Bhoomi Pujan Ceremony for the construction of 76 flats for Lok Sabha MPs at Dr. B. D. Marg, New Delhi on 10th August 2018
14.31 **New MoUs**

- MOU signed between IIT Vadodara and CPWD for Academic and Residential Buildings along with necessary Infrastructures at Dumad, Vadodara.
- MOU signed between Export Inspection Agency and CPWD for Office Building for Export Inspection Agency at Ahmedabad.
- MoU signed between National Institute of Food Technology Entrepreneurship & Management and CPWD for the works at NIFTEM Campus, HSIIDC, Industrial Estate, Kundli, Distt. Sonepat, Haryana.
- MoU signed between Sri Venkateswara University, Tirupati, and CPWD for Construction of new buildings at Sri Venkateswara University campus, Tirupati, Andhra Pradesh.
- MoU signed between Yogi Vemana University, Kadapa and CPWD for the execution of works sanctioned in Yogi Vemana University at Kadapa, Andhra Pradesh.
- MoU signed between Dr. Y.S. Parmar Government Medical College, Nahan (H.P.) and CPWD for Construction of Dr. Y.S. Parmar Medical College at Nahan Distt. Sirmour, Himachal Pradesh.
- MoU signed for construction of Permanent Campus for IIIT, Una (H.P.) between CPWD and IIIT Una, Himachal Pradesh.
- MoU signed between Mission Director, NHM and CPWD for Construction of 200 bedded MCH, Tanda, Kangra, Himachal Pradesh.
- MOU signed for C/o 200 Bedded ESI Hospital at Beltola Assam.
- MoU signed between Sri Padmavati MahilaVisvavidyalayam, Tirupati and CPWD for the Works at Sri Padmavati MahilaVisvavidyalayam, Tirupati, Andhra Pradesh.
- MoU signed between Indian Institute of Technology (IIT), Tirupati and CPWD for Development of Permanent campus of IIT, Tirupati at Merlapaka Village, Yerpedumandal, Chittoor, Andhra Pradesh.
- Memorandum of Cooperation signed between CPWD and CIDC to collaborate, to undertake initiatives to provide capacity & Institution building support and also propagation of best practices in the entire construction sector.
• MoU signed between School of Planning and Architecture and CPWD on variety of areas of mutual interest and benefit related to housing and urban development sector including exchanging and sharing knowledge on various aspects of design, execution and maintenance related to buildings.

14.32 Efforts made to bring systemic changes to improve efficiency, effectiveness and transparency and public image

i. Organizational Structure of the Department has been revised and delayered from seven levels to four levels for improving the efficiency and effectiveness of the Department

ii. For optimal and efficient utilization of Technical Man Power, Work Centric posting policy introduced in CPWD. The posting of the officers are being made on the identified work centres.

iii. 21 new hard / unpopular / Naxalite affected areas identified and guidelines for their incentives issued to motivate the officers and staff posted at these places.

iv. To implement Skill India Mission, it has been made mandatory in CPWD contracts that the contractors executing works costing more than 50 crores shall arrange site training for at least 10% of the unskilled workers in coordination with the National Skill Development Corporation and CPWD Regional Training Institutes.

v. Pursuant to one of the prime initiatives of the present government to create awareness to public at large about Policies and Programmes of the Government and their implementation, CPWD is bringing out a monthly newsletter to share and disseminate, its activities and achievements to the esteemed clients, stakeholders and to the public at large. This has proved to be a significant step in image building of CPWD.
vi. CPWD Works Manual 2019 brought out which provided much needed flexibility for taking prompt decisions by the field officers.

vii. CPWD brought out its own Green Rating Manual. CPWD buildings and projects shall now be rated as Green, Green plus, and Super Green based on the score obtained by them.

14.33 Sustainable Development Initiatives

i. Use of fly ash bricks/blocks made from C&D waste/AAC blocks in masonry works for nonstructural members has been made mandatory in place of clay bricks for the works in Delhi-NCR, Mumbai, Chennai, Kolkata, Bangalore, Hyderabad, Ahmedabad and Surat.

ii. CPWD is already using C&D waste materials in its works in shape of sand, aggregates, bricks, PCC blocks, Paver Blocks etc. In Delhi only, so far, more than 30000 Metric Tonne of C&D waste and about 20 lacs recycled blocks have been utilized. This resulted in to saving of equal quantity of natural stone and sand, reduction in CO2 emissions by over 600 Metric Tons and saving in water use by about 40,000 kilo litres.

iii. During last 5 years, over 11 million metric tons of fly ash have been used in CPWD in shape of bricks, concrete and cement additives. This has resulted in reduction in CO2 emissions by about 1 million metric tons.

iv. For promotion of use of Technical Textiles products in CPWD, relevant items have been included in schedule of rates and field units have been directed to encourage maximum use of Technical Textiles in CPWD works.

v. Suitable clauses and items of recycled products are to be incorporated in CPWD contracts to ensure 10% to 20% mandatory use of recycled material and products for all CPWD Projects in NCT of Delhi. In other places where such materials are available, these are also to be used in the works.

vi. Under SBM, Sewage Treatment Plants are being installed in the existing GPOAs and GPRAs maintained by CPWD. During FY 2018-19, 92 Sewage Treatment Plants and 79 Solid Waste Convertors have been installed in existing GPRAs/GPOAs.

vii. CPWD also initiated waste segregation at source at different locations in Delhi and outside with the help of start-ups with no cost to CPWD.
To address the problem of depleting ground water resources, CPWD is providing rain water harvesting systems in its campuses and works to conserve and use the rain water. CPWD has so far provided about 1100 rain water harvesting systems in different locations/areas under its jurisdiction in the country.

CPWD has taken firm measures for generation of renewable energy through installation of roof top solar PV Plants. ‘National Salt Satyagraha Memorial’ at Dandi, Gujarat has been developed as net positive energy campus by installation of solar trees. Roof Top Solar PV Plants have been made mandatory in all new projects of CPWD.

As Energy Efficiency Measures, existing fittings in 25 General Pool Office Buildings and 138 Non-GPOA Buildings across the country have been replaced with LED fittings. All new constructions are being done with energy efficient fittings and fixtures.

Towards greening of Delhi, as a special drive, CPWD planted over 58,000 trees at various residential colonies and office complexes maintained by it.

14.34 Accessible India Campaign

Under the 'Sugamya Bharat' Mission, CPWD has undertaken the massive task of making public buildings accessible and 548 buildings have been made completely accessible.

14.35 Activities of CPWD in North East Region

Central Public Works Department is actively engaged in executing variety of projects, complete with all the Civil, Electrical and Mechanical services on a turnkey basis, for various Central Government Departments and Autonomous bodies all over the places in Seven States (North East Part of India) of Arunachal Pradesh, Assam, Meghalaya, Nagaland, Manipur, Mizoram and Tripura.
ii. CPWD has recently opened a new region headed by Special Director General level officer at Guwahati to closely monitor the works of North Eastern States.

iii. To cater to the needs of performing to the expectations of various clients, CPWD engineers and staff are located in every state of N. E. Region under extreme difficult working conditions and trying environment from logistics and security considerations.

iv. CPWD engineers and staff had successfully delivered many credit worthy projects in the region despite the limited accessibility and reduced working season. CPWD has to its credit the development of Permanent Capital of the State of Arunachal Pradesh at Itanagar, large number of Self-Contained Campuses for Central Police Organizations and Aviation infrastructure in the region. During this financial year, North Eastern Region of CPWD has achieved a work load of Rs. 568.00 Crores.
14.36 Border Roads, Fencing & Flood Lighting Works

i. Central Public Works Department is involved in planning, technical scrutiny of all proposals by various executing agencies, advising MHA in technical matters related to the works of Border fencing, flood lighting and construction of roads along the international borders of the country. CPWD is executing border fencing, roads and lighting works along Indo-China, Indo-Pak and Indo-Bangladesh Borders.

ii. During the FY 2018-19, Border Region has executed works amounting to Rs. 621.00 crores along Indo-Pak, Indo-Bangladesh and Indo-China Border.

Photographs of some of the border works executed by CPWD.
Important events

I Business Meets held by CPWD:

14.37 Business Meets have been organized at different parts of the country as a confidence building measure with the clients and bringing more business to the Department. CPWD has been able to get many works due to these meets.
14.38 To promote use of Technical Textiles, Fly Ash, C&D Waste products in Civil Construction, one Day Seminar on "Use of Technical Textiles, Fly Ash, C&D Waste in Civil Construction" was organized in New Delhi on December 17, 2018.

Seminar on "Renewable Energy and Efficiency Measures in Built Habitat"

14.39 To spread awareness on implementation of Energy Efficiency Measures and Generation of clean and green power through Solar Power Generation, a day long National Seminar on "Renewable Energy and Efficiency Measures in Built Habitat" was organized in New Delhi on March 8, 2019.

14.40 An Annual Flower Show and Garden Competition was organized at Government Mehrauli Nursery, New Delhi on February 22 & 23, 2019 in New Delhi. It was a unique and important event for the flowers and garden lovers of Delhi.

14.41 An Expo cum Conference on Global Housing Technology Challenge, was organised by the Ministry of Housing and Urban Affairs on 2nd and 3rd March 2019, at Vigyan Bhawan, New Delhi, in which CPWD participated in a grand manner.

14.42 CPWD also participated in Pravasi Bhartiya Diwas at Varanasi and Vibrant Gujarat Summit at Gandhi Nagar in a grand manner.

14.43 Lodhi Art District, India's first Public Art District, created with the support of St+art India Foundation with over 50 murals, created by acclaimed Indian and International contemporary artists. Delhi with its rich heritage has a new cultural destination.
A National Seminar on "Greenery and Landscaping" was organized on April 5, 2019 in New Delhi, as a part of continued effort for green and clean sustainable development of CPWD.

As a drill to improve maintenance, CPWD held a fortnight maintenance drive of GPRA /GPOA and other assets maintained by it across the country on the occasion of the Independence Day. This drive culminated on 6th September 2018 as a whole was a great success.

Awards and Recognition

Shri Prabhakar Singh, Director General, CPWD conferred the CIDC Commendation Award of 'Champion Technocrat Par Excellence' for promoting innovative and sustainable practices in construction and creating vibrant environment in the construction fraternity.'