## Chapter - 3

### **Executive Summary:-**

The Project Management Unit (PMU) was setup under the aegis of the Finance & Planning Department, Government of Puducherry, to monitor the ongoing infrastructure projects sponsored under Centrally Sponsored Schemes (CSS), Central Sector (CS), Negotiated Loans (NL), and other financial institutions.

The team made the site inspections based on priority to cover all the departments that shared the project list for implementing the Infrastructure projects.

In the month of June, team visited 15 projects in different locations along with the concerned department representatives covering PWD, Smart City & LAD. The observations and findings are illustrated below.

- 1.) Comprehensive Water Supply Scheme at Sudhana Nagar (OHT and Allied Works), which is funded by HUDCO, was awarded on February 29, 2016, and the date of completion is August 29, 2017. It has not been completed as of the date of this report.
  - The Current physical progress is 97%, and the financial progress is exceeding 100%. A number of times an Extension of time (EOT) has been provided to the contractor, with the last completion date being June 30, 2022, and finally the work was foreclosed on November 25, 2022. A lot of balance work is yet to be completed, for which an estimate has been submitted to C.E. for 88 Lakhs to obtain Expenditure Sanction. Complete EOT details are not readily available from the department. Maximum delay in the completion of the project.
- 2.) Comprehensive water supply: Construction of 10 Lakh Liter Double Decker OHT and allied works at Dr. Dhanbalan Nagar, Gandhi Thirunallar in Zone VII of Muthirapalayam, Puducherry work is in progress since January 18, 2020. Date for completion as per agreement is July 17, 2021 but the physical progress is only 95% completed. Project funding is done by HUDCO.
  - Necessary actions should be initiated by the departments and contractors to complete the work
    on time. Currently, the project is running under EOT, and the date of completion is September
    30, 2023. Complete EOT details are not readily available from the department to access
    the delay period.
- 3.) Comprehensive Water Supply Scheme to Muthirapalayam, Sanarpet & other areas: Construction of 10 Lakhs litres Double Decker Circular OHT funded by HUDCO, was awarded on March 16, 2019 supposed to be completed by September 15, 2020, as per the original contract

agreement. As of today, even after many EOTs have been granted, the **physical progress** is only **75.90** % and date of completion is **September 30, 2023**.

- Lot of pending works are to be attended on priority basis.
- Letters from the department to the Forest Department were only sent on July 19, 2022, which is after the project was actually finished. Following the issuance of Work Orders and Agreements, simultaneous planning for interdepartmental operations should be undertaken. As of this date, the Forest Department has not replied.
- Complete EOT details are not readily available from the department. Currently, the project is in its third year from the actual date of completion.
- 4.) Comprehensive Water Supply Scheme to Viswanathan Nagar Zone II, has been awarded on November 11, 2018, and the actual date of completion is February 24, 2020.
  - This project is funded by HUDCO. Physical progress is only 80% and currently under EOT, and the completion date is September 30, 2023. The following pending works, like tile fixing on sidewalls (OHT and Sump), flooring of containers, and electromechanical works are to be completed on priority. A Lot of honeycombs are visible in construction; proper construction methods must be adopted. The Safety of Laborers is not taken care of properly.
  - Complete EOT details are not readily available from the department.
  - The application for LT Connection has not yet been submitted to the EB department.
- 5.) Works for Construction of Double Decker Circular OHT of 10 Lakhs Litres capacity at TB Sanatorium Campus in Gorimedu, sponsored under HUDCO fund has been awarded on February 6, 2016 and the actual date of completion is May 5, 2017.
  - The physical progress is only 60% and currently under the EOT, and the completion date is September 30, 2023. The following pending works are yet to start and to be completed on priority.
  - Supply, Erection & Commissioning of a 50 HP Centrifugal Pump, Electromechanical works,
     Windows, Rolling shutters and Compound wall Works.
  - No records are available for the leak proof test and CPWD norms must be followed for the same. Complete EOT details are not readily available from the department.
- 6.) Improvements to Cement Concrete Road in Town area providing drainage facilities to the Kennedy Nagar and Improvements to Shanthi Nagar Outer Road, Puducherry were awarded on May 11, 2023, and the actual date of completion is March 10, 2024, which was funded by SIDBI.
  - Physical progress is 10% completed and currently work is under progress.

- Construction materials stocked near the residential area need to be controlled for pollution.
- The AJAX Machine used for concrete batching doesn't have weigh-in slips for checking the ratio and volume of materials.
- 7.) In the Augmentation of Water Supply System for Sudhana Nagar and surrounding areas in Zone X, Mudaliarpet, Puducherry (Distribution Main, Pumping Main and Road Restoration Works), the work was awarded on August 28, 2022, and the date of completion is June 27, 2023. Project is taken under AMRUT scheme.
  - Physical progress is only 22%; the EOT application is under process.
  - The amount of manpower deployed is very low for 32-kilometer pipeline works, and no safety diversion boards are used during construction works. The project is currently under 1<sup>st</sup> EOT (application under process), and steps should be taken to complete the balance of 78% of the work within time.
- 8.) Augmentation of Water Supply to Kattamanikuppam OHT in Muthialpet, Puducherry Municipality and Rainbow Nagar OHT in Oulgaret Municipality. Date of commencement is January 21, 2023 and date of completion is November 9, 2023.
  - 28% of the physical work has been completed. The project is funded under AMRUT.
  - The Progress of work is very slow due to intermittent work.
  - Big Boulders and waste debris are also used as backfill materials; this will damage the DI pipes
    at a later stage. These types of materials shouldn't be used for works for which the Engineer In
    Charge shall have proper checks in place.
- 9.) Sewerage Scheme for the left-out areas of Zone III in Orleanpet, Nellithope and Kathirkamam Constituency, Puducherry which is under SMART CITY fund with the actual start date as October 29, 2022 and actual completion date is July 28, 2023.
  - Physical progress is only 50%. Proper stocking methods are not followed to stack the HDPE pipes, and the numbering of manholes is not carried along with flow directions.
  - Road restoration work has yet to start.
- 10.) Construction of Collection Well 4m Dia with allied linking arrangements to Sub-Pumping Station, Lal Bahadur Sastri Street, funded by SMART CITY. Actual start date is November 12, 2022 and actual completion date is April 11, 2023.

- Physical progress is only 20%. Work progress should be monitored on a daily basis to avoid
  further delays in pending work. Necessary diversion boards and hard barricades to be put up for
  the safety of labourers.
- As per the standards, EOTs are to be applied by the Contractor or subcontractor for renewal of
  the work order, but in many instances, the Contractors are not applying, and in place, PWD is
  requesting contractors to apply for EOT to keep the contract alive. This mindset among
  contractors should be eliminated by following strict procedures and standards as per CPWD
  norms.
- 11.) Providing and laying of Pumping Main from Main Pumping Station to Dubrayapet STP, Puducherry funded by SMART CITY, with a date of commencement as October 29, 2022. 50% of the work has been completed. Date of completion is August 28, 2023.
  - Pipeline to be laid inside the Electricity Department boundary for around 200 meters, for which the letter has been forwarded.
  - Proper closing and backfilling work must be done in prime areas near the beaches, etc., for
    temporary traffic. Surplus materials are to be removed using manpower wherever machines are
    not reachable. Remaining works like interlinking, road restoration, etc. are to be taken care of
    and completed within the project timeline.
- 12.) Providing Alternate 300mm Dia. Pumping line from SPS, Lal Bahadur Sastri Street to Dubrayapet STP with allied works funded by SMART CITY. Date of commencement is October 29, 2022 and date of completion is March 28, 2023.
  - The physical progress is only 75%, and the first EOT is approved with a completion date of September 30, 2023. The department has requested that the contractor to submit the EOT application on 27.04.2023. i.e., One month from the actual date of completion (a gap in the contract). Meanwhile, the contractor also hasn't shown interest in submitting the application for EOT. These activities show the lenience or standards of contractors in their execution.
  - Balance pipe laying and Road restoration work are to be taken up as priorities.
  - The EB department has not accorded permission or replied to requests for realignment of pipelines within its boundaries.
- 13.) Sinking of New Collection Well at Main Pumping Station in Puducherry funded by SMART CITY with the start date as February 26, 2023 and date of completion as June 25, 2023.
  - Physical progress is 20% only.

- Poor quality shuttering leads to leakage of concrete between the layers or lifts, which are to be properly sealed before concreting using hessian cloths. Proper use of PPE should be advised.
- 14.) Supplying, Erection and Commissioning of 400 KVA Genset with trolley to the collection well at MPS in Puducherry funded SMART CITY with the start date of the project as February 07, 2023 and date of Completion as May 06, 2023.
  - Even these types of works are not being completed within the 3-month deadline, which will
    impact the credibility of PWD works. EOT is being requested by PWD to the contractor for
    submission of the EOT application.
  - The Project is running under its 1st EOT, with date of completion of September 30, 2023.
- 15.) Providing and laying D.I. Pumping main from Peter Nagar to PRTC pumping station to extending sewerage facilities to Anna Nagar, Sakthi Nagar and surrounding areas of Zone-IV Nellithope, Puducherry is funded by SMART CITY. The date of start of work is

  November 11, 2022 and the date of completion is May 11, 2023.
  - The **Physical progress is only 60%** complete, and also the actual date of completion is exhausted. The EOT application is not submitted by the contractor to the department.
  - There is less manpower deployed for the works at site, and also the deshuttering works are not done as per the standard timelines. Wherever the DI pipes run over the slabs of culverts, box concreting must be done around the pipes to prevent damage.
  - Electromechanical works are still pending, and since the actual date of completion is over, efforts must be made to complete all the pending works within the 1st EOT period.

#### Suggestions:-

- > Proper documentation is to be taken care of by executing agencies like Extension of Time (EOT) letters, interdepartmental correspondences, etc.
- > Safety measures should be strictly adhered to while implementing infrastructure projects; violators should be warned, and further penalization clauses should be implemented in all contracts and Agreements.
- ➤ A lot of projects are running under EOT; hence, the committee shall frame appropriate steps to narrow down the delay in execution.

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With the available list of projects shared by the Public Works Department (PWD) for the ongoing projects, the team made the site inspections based on the priority to over all the divisions of PWD which are implementing the Infra projects.

In the month of May, team visited 25 projects in different locations along with the concerned department representatives. The observations and findings are illustrated below.

- 1.) The project for the **AYUSH building**, Villianur, which is under CSS, was awarded on March 18, 2019, and the date of completion is June 10, 2020. It has not been completed to 100% as of the date of this report.
  - Current physical progress is 99% and financial progress is 79%. 16 times the Extension of time (EOT) have been provided to the contractor with the last completion date as 30.04.2023. But still, the project is unveiled.
- 2.) In the **Urban Entertainment Centre** in the Old Port area, for which work is in progress. Start date of the project is February 19, 2022 and the date for completion as per agreement is July 28, 2023 but the physical progress is only 20% completed. This project is supported by Smart City Fund. Necessary actions should be initiated by the departments and contractors to complete the works on time.
- 3.) Upgradation of the existing fishing harbour in Thengaithittu, sponsored under CSS, was awarded on September 19, 2019 supposed to be completed by January 7, 2020, as per the original contract agreement. As of today, even after 12 EOTs have been granted, the physical progress is only 56% and date of completion is May 31, 2023. Again, the EOTs have to be provided to complete the project, which should be ensured for proper completion.
  - In spite of providing all the work to one contractor, if it could have been separated into
    individual packages, some of the buildings could have been completed on time. If a delay
    in the project is foreseen, necessary actions should be initiated by the departments at the
    earliest.

4.) Another work at RC-20 for the reconstruction of an **existing damaged single-lane bridge into a double-lane bridge**, including improvements to Nathamedu junction, Karikalampakkam, and Pudukuppam roads, has been awarded on January 16, 2022, and the actual date of completion is January 15, 2023.

The physical progress is only 50% and currently under the 5th EOT, and the completion date is June 30, 2023. The following pending works, like earthen shoulders, road lane markings, signage boards, vent cleaning, weep holes clearing and painting have yet to start.

- 5.) Works for improvements to the **RC-18 road** from Guduvaiyar Bridge to Kumaramangalam Bridge, Korkadu road branching from RC-18 to connect at RC-19, and Korkadu Erikarai road branching from RC-20 to connect to Korkadu road in **Nettapakkam Commune**, sponsored under NABARD loans has been awarded on February 2, 2022, and the actual date of completion is March 1, 2023.
  - The physical progress is only 70% and currently under the 8th EOT, and the completion
    date is June 30, 2023. The following pending works, like earthen shoulders, road lane
    markings, and signage boards, are yet to start in the completed stretches on priority.
- 6.) Improvements of the road from Krirumambakkam Entrance Arch to Vambapet Road, Old Paper Mill Road, Pillaiyarkuppam Road, and Manapet Road in **Bahour Commune** were awarded on December 18, 2021, and the actual date of completion is September 17, 2022 which was sponsored under NABARD.
  - Physical progress: 82.86% of the work was completed. Currently, the project is under 8<sup>th</sup>
     EOT, and the date of completion is July 31, 2023.
  - Works like earthen shoulders, road lane markings, signage boards, and drain work at
    junctions are yet to be started. A letter for the shifting of trees in the alignment is not
    initiated in the early stages of work.
- 7.) In the widening of the existing **two-lane to four-lane Puducherry-Villupuram road** (NH-45A, new NH-32) from KM 25+600 to KM 37+420, including strengthening and construction of a **new high-level bridge across the Sankarabarani river at Ariyapalayam** on an EPC basis, the work was awarded on March 11, 2022, and the date of completion is March 9, 2024. The physical progress is 60% and moving as per the schedule. Project is funded by MORTH.
  - Exclusive safety engineers are to be deployed for major projects. Imposing penalties for safety defaulters may be considered in future agreements. Dust pollution should be controlled in the batching plant area and the site under construction near bridges, etc.

- 8.) **Periodical renewal of ECR Road** from Karuvadikuppam ravine @ Ch.146/810 to Rajiv Gandhi Square @ Ch. 149/980 in ECR, Puducherry. Date of commencement is February 24, 2023 and date of completion is April 9, 2023.
  - 90% of the work has been completed, for balance works EOT has to be provided to complete on priority. The project is funded by SIDBI.
- 9.) Widening and improvements to **Perambai road from Moolakulam to Moolakadai** in Puducherry which is under NABARD fund with the actual start date as February 11, 2022 and actual completion date is January 15, 2023.
  - Physical progress is only 60% and financial progress is 82.16%. Under 3<sup>rd</sup> EOT with the completion date as June 30, 2023.
  - Lots of pending works like drain, road widening, culverts works and appurtenances to be completed. Electrical transformers and poles are to be shifted in priority.
- 10.) Widening the existing **two lane to four lane across Malatar** at Ch 47+750 of NH45A in Puducherry on Engineering, Procurement & construction (EPC) basis funded by MORTH. Actual start date is April 27, 2022 and actual completion date is April 26, 2023.
  - Physical progress is only 35% and under 1st EOT, Date of completion: 26.10.2023. Work
    progress should be made on a daily basis to avoid further delays before the onset of the
    monsoon. Necessary diversion boards and hard barricades to be done for the safety of road
    users.
- 11.) Improvements to the Existing Water Supply Systems of Coastal Villages in Bahour Commune, Puducherry funded by CSS (RURBAN), with a date of completion of April 1, 2022. Only 35% of the work has been completed. The project is currently under 2nd EOT, with the date of completion being June 30, 2023. Extra efforts are to be put for completion.
- 12.) The following list of projects that have recently started and are going within the project schedule.
- a.) Improvement to **RC-22** Sedarapet road from Pathukannu road junction at Ch.0/000 to Mailam road junction at Ch.10/300 of Sedarapet village in Puducherry by EPC mode under Central Road Infrastructure Fund. (CRIF). Actual date of completion is October 1, 2023 with the physical progress of 50%.

- b.) Construction of **link road bye-passing Natesan Nagar Arumparthapuram segment** of NH 45A in Puducherry funded by HUDCO has the start date as February 10, 2023 and completion date is June 09, 2024. Site progress should be expedited to complete on time. Electrical poles and tree cutting approvals are requested from the concerned departments.
- c.) Improvements to **RC-12** Sanniyasikuppam road and **RC-13** Vadhanur road connecting Moolakulam junction and Thirubuvanai junction in NH45A funded by CRIF with the completion date as October 04, 2023 and physical progress is 80%.
  - Balance 1 km of road is to be completed, and reforestation for the removed trees should be started and monitored by the department. Road appurtenances should be fixed on priority.
- d.) Periodical Renewal from Km.37/420 to 54/180 of NH45A by providing 50mm thick Bituminous Concrete including Recycling existing pavement by cold milling and laying 40mm BC on wearing coat of bridges as per IRC 120-2015 and Other road safety measures on Engineering, Procurement & Construction (EPC) basis funded by MORTH. Physical progress is 75% and date of completion is September 13, 2023.
  - While laying DBM or BM wider pavers should be used to avoid joints. Necessary medians
    and barricades should be provided by contractors to differentiate the lanes and to avoid
    overtaking and ensure safe driving of vehicles.
- e.) Strengthening and Improvements to **RC 12** Sanniyasikuppam road, **RC13 Sellipet road**, Four Car Street, Muthupillapalayam roads funded by NABARD, with the start date of March 31, 2023, and the completion date of December 31, 2023.
  - In RC-12, no physical progress was seen even after 2 months. For Land dispute of 30 metres, Tahsildar and Surveyor was requested for road boundary marking, which should be speeded up.
  - RC-13 Sellipet road works for 8,126 metres are already done by NH / PWD Division with CRIF Fund. Hence, the B&R-North division has to complete the sanctioned stretch and close the project. This approved fund cannot be used for other projects.
- f.) Strengthening and Improvements to RC 21 Frontier road:-
  - Total Length of Road is 9.385 KMs. BM work is completed only for 3.48 KM by the B&R (N) division. For 5.905 KM work is already done by the NH/PWD division under CRIF funds; hence, the balance funds provided by NABARD can't be utilised for other projects by B&R (N).

- g.) Improvements to the 3 Nos. of roads (RC-7, Suthukeny road (7.550 KMs), RC-32 Thirukkanur road (2.46 KMs), Suthukeny to Lingareddipalayam road (4.765 KMs)) in the jurisdiction of Buildings and Roads (North) Division, Mannadipet Commune funded by NABARD with date of completion as September 30, 2023.
  - In RC-7, electrical poles and tree cutting work are to be taken up on priority. RC-32 works
    are yet to be commenced.
- h.) **Improvement to 5 Nos. of roads** (Ariyapalayam to Senthanatham road, Ariyur-Anandhapuram road, Mathur Alankuppam to Sanjeevi Nagar road, Thethampakkam road (2.35 KMs) and Katterikuppam to Vazhudavour road (1.200 KMs)) Buildings and Roads (North) funded by NABARD with the start date as March 31,2023 and completion date as September 30,2023.
  - Works are going on only on Thetampakkam Road, and only one work has started in the above package.

Out of the 25 projects visited, nine are under EOT. Hence, special attention is to be provided to these projects for their early completion. They are as follows:

- i) Construction of 50 bedded intergraded AYUSH Hospital at Villianur, Puducherry Sub Work Construction of 50 bedded integrated AYUSH Hospital at Villianur, Puducherry.(Civil works) under <u>Special Building Division ~II ~ 16<sup>th</sup> EOT</u>.
- ii) Reconstruction of existing damaged single lane bridge in to double lane bridge including improvement to Nathamedu junction, Karikalampakkam and Pudukuppam roads at RC.20 Kambilikaran kuppam- Embalam road in Nettapakkam commune, Puducherry under <u>Buildings & Road (South) 5th EOT</u>.
- iii) Improvements to RC-18 road from Guduvaiyar bridge to Kumaramangalam bridge, Korkadu road branching from RC-18 to connects at RC-19 and Korkadu Erikarai road branching from RC-20 to connects to Korkadu road in Nettapakkam Commune, Puducherry under <u>Buildings & Road (South) 8th EOT.</u>
- iv) Upgradation of the existing fishing harbour at Thengaithittu, Pondy under the Centrall Sponsored Scheme (CSS) on blue Revolution: Integrated Development and Management of Fisheries under <u>Buildings & Road (South) 12<sup>th</sup> EOT</u>.
- v) Improvements of to the road from Krirumambakkam entrance arch to vambapet road,
  Old Paper mill road- Pillaiyarkuppam & Manapet road in Bahour Commune,
  Puducherry under BR <u>Buildings & Road (South) 8th EOT</u>.
- vi) Periodical renewal of ECR Road from Karuvadikuppam ravine @ Ch.146/810 to Rajiv Gandhi Square @ Ch. 149/980 in ECR, Puducherry under <u>NH division 1st EOT.</u>

- vii) Widening and improvements to Perambai road from Moolakulam to Moolakadai in Puducherry under *NH division 3<sup>rd</sup> EOT*.
- viii) Widening the existing two lanes to four lanes across Malatar at Ch 47/750 of NH45A in Puducherry engineering procurement & construction (EPC) basis under <u>NH division</u> – 1<sup>st</sup> EOT.
- ix) Improvements to the Existing Water supply Systems of Coastal Villages in Bahour Commune, Puducherry under *Public Health division 2<sup>nd</sup> EOT*.

# Suggestions:-

- > The constitution of a high-level committee to discuss the status and progress of delayed projects mainly under CSS, CS, and NL can be conducted quarterly or half-yearly with all the concerned departments.
- Administrative approvals to be obtained for (Extension of Time) EOTs.
- > Safety measures should be strictly adhered while implementing infrastructure projects.