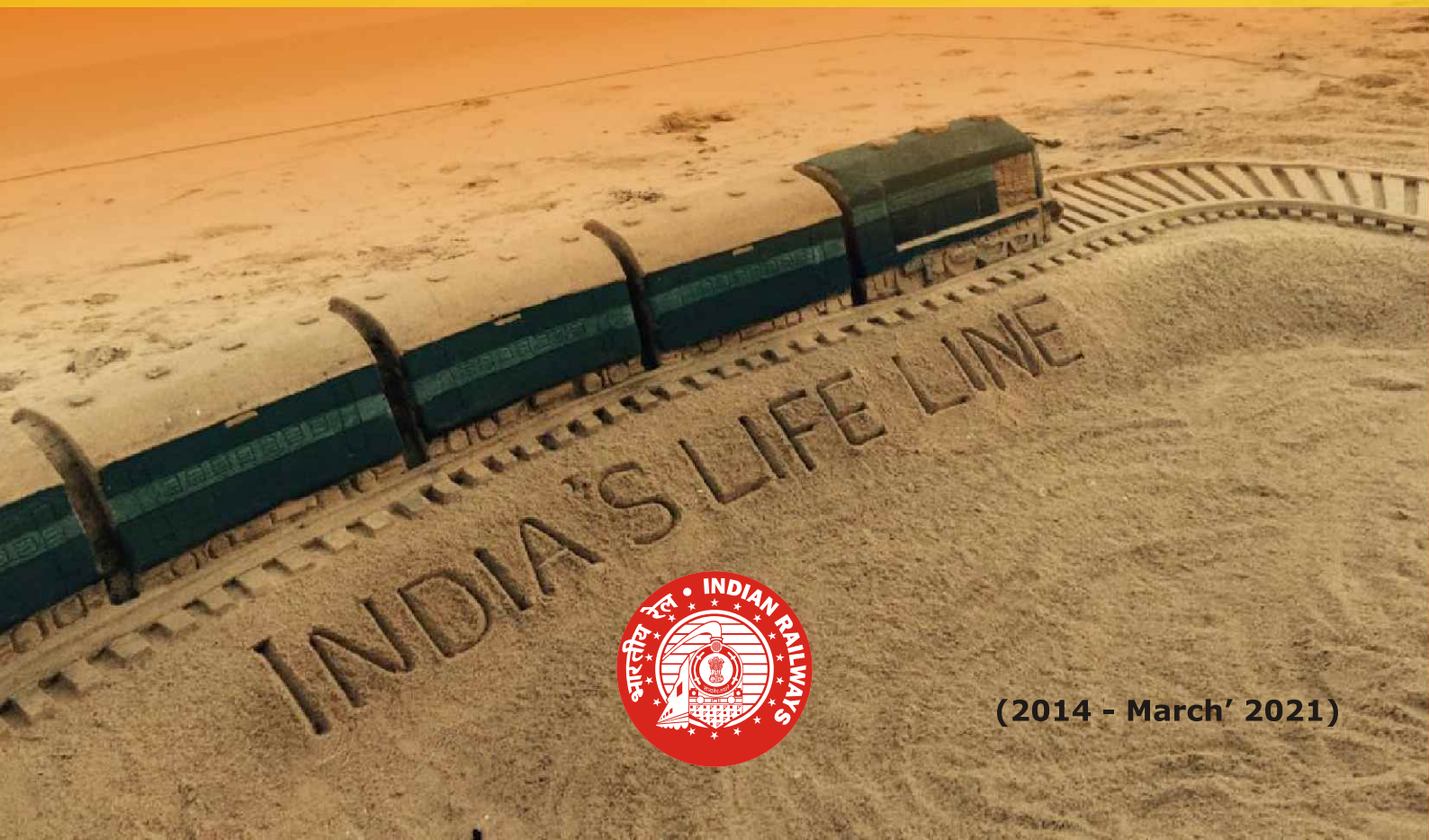




Shri Narendra Modi
Hon'ble Prime Minister

NEW RAILWAYS
NEW ODISHA



(2014 - March' 2021)



Desh ko Gati rail se
Pragati bhi rail se

Shri Narendra Modi
Hon'ble Prime Minister



सत्यमेव जयते

PREFACE



Vidya Bhushan
General Manager
East Coast Railway

The territory of Odisha falls under the jurisdiction of three Railway Zones with East Coast Railway serving 26 districts, South Eastern Railway serving 04 districts and South East Central Railway serving Jharsuguda.

Asset creation has been a focus of Indian Railways to expand its outreach by providing access to the people of Odisha and accelerate its development to industry for raw materials, minerals and to the market for the finished industrial products. New lines, multiple lines to augment existing lines capacity, electrification of tracks, railway stations continue to be added at an accelerated pace. This is leading industries to substantially augment their capacities for products of steel, aluminum, electric power etc.

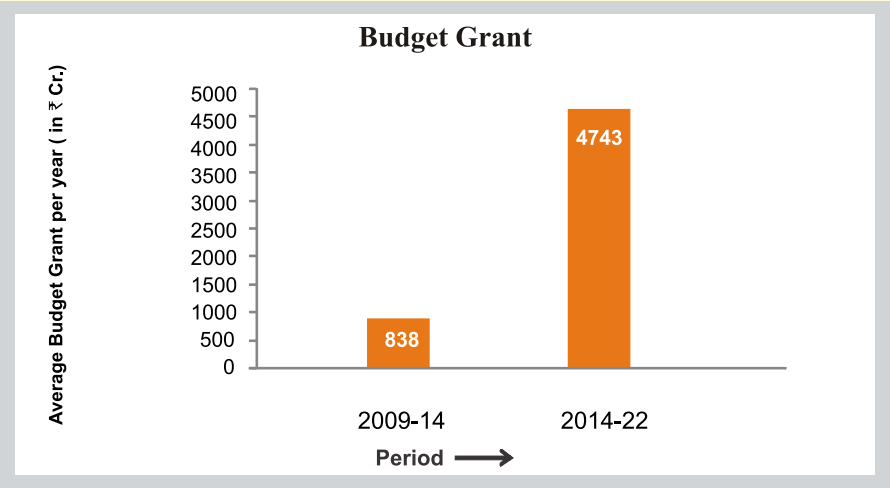
COVID-19 pandemic was challenged head-on to cover not only railway staffs and their families, passengers but also the lager areas of people of Odisha in the vicinity of railway premises. Food was provided to needy during lockdown, masks and sanitizer were distributed, quarantine beds and COVID beds- stationery as well as mobile were offered to the Government of Odisha to augment its Capacity to help people infected with COVID - 19. 117 COVID - 19 beds, hospitals were made available. 2000 quarantine beds distributed over various locations were also made available to Odisha. 1636 mobile quarantine beds in train coaches were also offered. Production of hand sanitizer, masks, face shields, hospital equipments etc was ramped up to augment market supplies in Odisha. Fruits, vegetables, food grain, medicines, medical consumables and equipments were moved through Odisha by running special parcel express trains.

This booklet is a valiant effort to compile contribution of East Coast Railway to the COVID-19 war of the people and Government of Odisha.

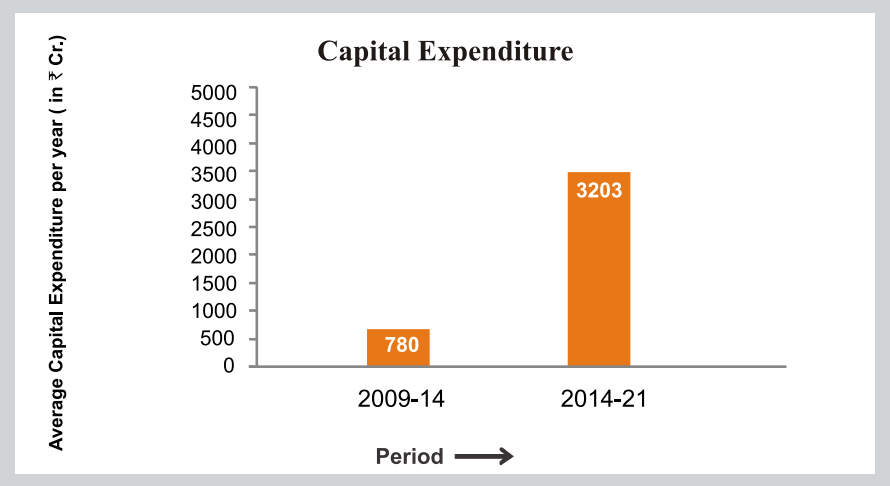
(Vidya Bhushan)
General Manager
East Coast Railway

Increased Capital Investments

Average Budget Grant per year		
2009-14	**2014-22**	**%Increase**
₹838 Cr.	₹4,743 Cr.	466%



Average Capital Expenditure per year		
2009-14	**2014-21**	**%Increase**
₹780 Cr.	₹2,862 Cr.	311%

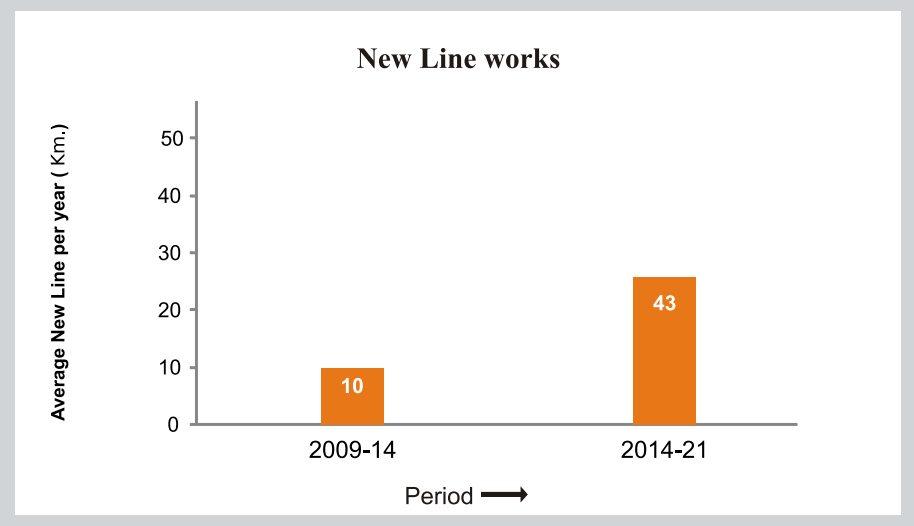


It may be noted that the budgets allocated to various projects are not apportioned State wise but reflect the cost of the project.

Infrastructure Thrust

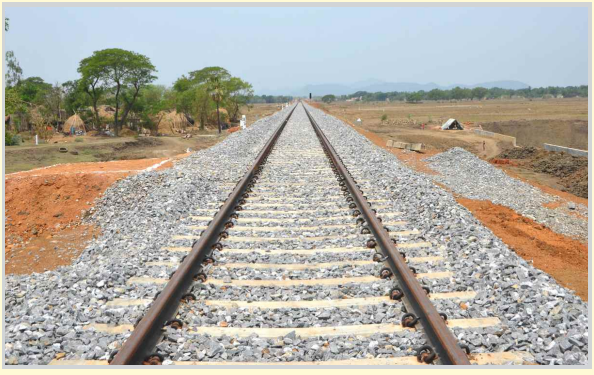
New Lines completed in last 7 years

- New lines of 293 Km completed in 2014-21 when compared to 2009-14 it was only 98 Km
- Construction of average New lines has gone up from 10 Km per year in 2009-14 to 25 Km per year in 2014-21



New Lines

- Nayagarh Town-Mahipur New Railway Line (12 Kms) of Khurda Road-Balangir New Line
- Talcher-Sunakhani (20 Kms) of Talcher-Bimalagarh New Line
- Haridaspur-Paradeep New B.G. Line of 79.546 Kms. in Khurda Road Division



New Line between Khurda Road and Nayagarh Town

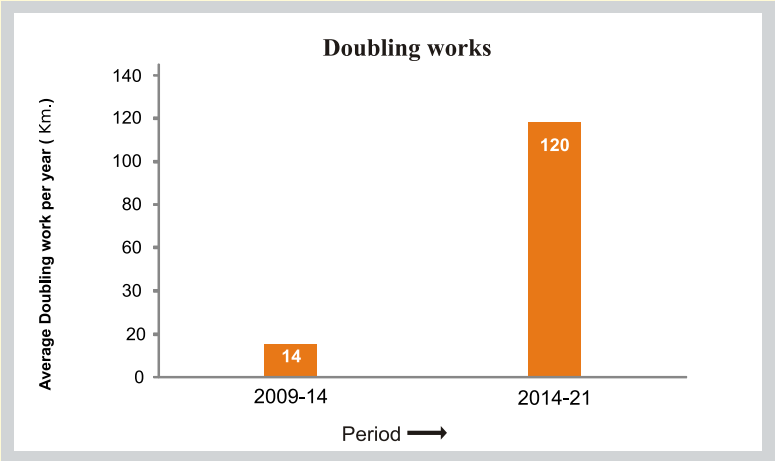


Haridaspur-Paradeep Railway Line

Infrastructure Thrust

Doubling Work completed in last 7 years

- Doubling work of 841 Km was completed in 2014-21 when compared with 2009-14 it was only 79 Km
- Average doubling work has been scaled up to 120 Km per year during the period 2014-21 compared to 14 Km per year in 2009-14



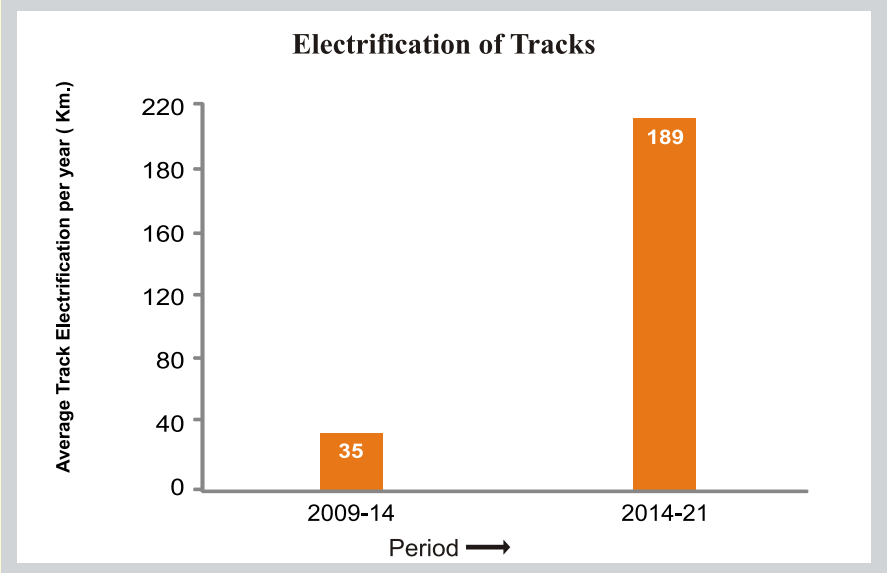
Doubling of Tracks

- Dungripali-Khaliapali (13 Km)
- Amagura-Ambagaon (10.02 Km)
- Ambagaon-Hotpad (7.53 Km)
- Kotpad-Charmulakusumi (11.73 Km)
- Deogaon-Saintala (4.172 Km)
- Jujumura-Charmal (16.92 Km)
- Komakhan-Khariar Road (9.282 Km)
- Loisinga-Balangir (18.8 Km)
- Lakhna-Turekela Road (24 Km)
- Kumar Sodra-Kaklur (12.2 Km)
- Angul-Kerajanga (13.51 Km)
- Sambalpur-Hirakud (7.25 Km)
- Permanent diversion between Charmal-Rairakhole (2.883 Km)
- Khariar Road-Komakhan double line (9.666 Tkm)
- Jarapada-Kerejanga double line (7.789 (Tkm)
- Charmal-Rairakhol diversion line (2.883 Tkm)
- Loisingha-Balangir Section (18.25 Tkm)
- Lakhna-Turekela Section (26.7 Tkm)
- Angul-Kerejanga (11.364 Tkm)
- Bolangir-Bichhupali (18.041 Tkm)

Infrastructure Thrust

Fast Track Electrification

- Electrification of tracks has been scaled up to 207 Km/ per year in 2014-20 from 35 Km/per year in 2009-14
- Electrification of 1012 route Km. (RKm) done since 2014
- Electrification of Angul-Sambalpur 156 (RKm)
- Electrification of Singapur Road-Damanjodi 148 (RKm)
- Electrification of Vizianagram-Singapur Road 139 (RKm)
- Electrification of Titilagarh-Lakholi 172 (RKm)
- Electrification of Singapur Road-Titilagarh 126 (RKm)
- Electrification of Titlagarh-Sambalpur 178 (RKm)
- Electrification of Sambalpur-Jharsuguda Road 49 (RKm)
- Electrification of Haridaspur-Kendrapara 44 (RKm)
- Electrification of Lanjigarh Road-Junagarh 58 (RKm)
- Electrification of Naupada-Gunupur 90 (RKm)
- Electrification of Talcher-Sunakhani 18 (RKm)
- Electrification of Patapatnam-Gunupur 57 (RKm)



Ongoing Electrification

- Electrification of Khurda Road-Nayagarh Town-Nuagaon (90 RKm)
- Electrification of Balangir-Bichupali (16 Rkm)
- Electrification of Rupsa-Bangriposi (89 Rkm)

Infrastructure Thrust

Elimination of all Unmanned Level Crossings (UMLCs)

- All Unmanned Level Crossings have been eliminated / manned by commissioning of 27 Road Under Bridges (RUBs)/Sub-Ways, Diverting 07 Level Crossings to other substitute way and Manning 97 UMLCs.
- In the past six years, 525 numbers of Unmanned Level Crossings have been closed in East Coast Railway jurisdiction
- Will avoid accidents at level crossings as well as increase sectional capacity
- 133 Nos. of Manned Level Crossing gate have been eliminated

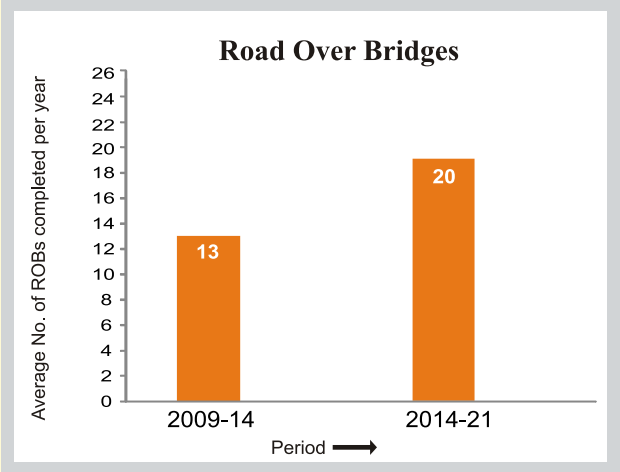


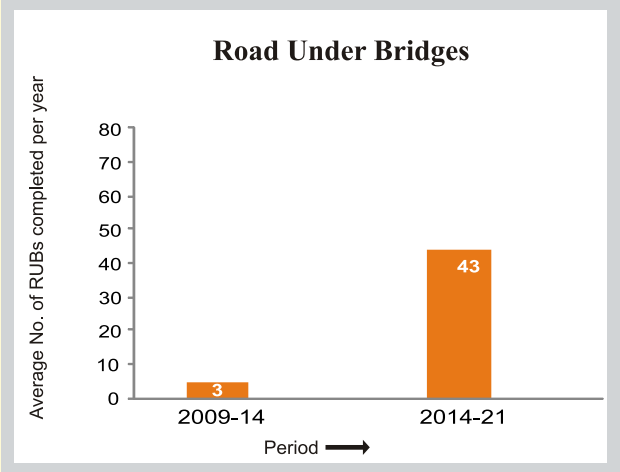
Hon'ble CM of Haryana Shri M.L. Khattar and Hon'ble Former Minister of State of Railway (Late) Shri Suresh Angadi felicitating GM ECoR Shri Vidya Bhushan on the occasion of 64th National Railway Week Celebrations at Ambala, on 21st July 2019, for eliminating all UMLCs from ECoR's jurisdiction before target

Infrastructure Thrust

ROAD OVER BRIDGES (ROBs) & ROAD UNDER BRIDGES (RUBs)

- Uninterrupted and safe movement of road traffic
- Improving speed of trains and enhancing passenger safety







Road Over Bridge at Malatipatpur



Road Under Bridge near Khurda Town Station

Other Works in the Pipeline

- 5 new line projects of 610 Km at a cost of ₹8,811 Cr.
- Doubling, 3rd line & 4th line projects of 837 Km
- New Lines work sanctioned for Jeypore-Malkangiri, Jeypore-Nabrangpur & Naupada-Gunupur New Broad Gauge Line upto Theruvali
- Provision of Train Management System covering 99 stations over Khurda Road Division has been sanctioned at a cost of ₹60 Cr.

Odisha Connected



Hon'ble Prime Minister Shri Narendra Modi inaugurating / dedicating a basket of projects at Balangir in presence of Hon'ble Governor of Odisha Shri (Prof.) Ganeshi Lal, Hon'ble Union Minister Shri Dharmendra Pradhan, Hon'ble Union Minister Shri Jual Oram and other dignitaries



Dedication of Nayagarh Town-Mahipur New Railway Line by Hon'ble Union Minister Shri Dharmendra Pradhan



Railway projects dedicated / inaugurated by Hon'ble Union Minister Shri Dharmendra Pradhan and Hon'ble Union Minister of State Shri Manoj Sinha at Bhubaneswar



Passenger Amenities works dedicated by Hon'ble Union Minister Shri Dharmendra Pradhan and Hon'ble Union Minister Shri Radha Mohan Singh at Cuttack

Passenger Security

- Total 421 CCTVs have been installed at different Important stations like Puri, Bhubaneswar, Cuttack, Rayagada, Jharsuguda, Rourkela & Sambalpur, Balasore, Dhenakanal & Angul.
- RPF has successfully arrested 449 criminals involved in various crimes against passengers in trains & Railway premises
- Luggage Scanner available at Bhubaneswar, Cuttack, Puri for passenger security
- Under Vehicle Surveillance System available at Bhubaneswar, Puri & Cuttack under ISS
- RPF Dog Squads are utilized at Bhubaneswar, Puri, Sambalpur, Koraput & Rayagada in anti-sabotage check/detection of passenger related crimes
- 1558 CCTV cameras are also provided in 193 coaches of 28 trains originating from Odisha for passenger security
- For quick mobility for passenger security and assistance, 02 Segways are provided each at Cuttack, Puri and Bhubaneswar for station patrolling duty
- RPF has rescued 12 women and 568 of children and handed over to their parents, relatives and NGOs
- Lady RPF personnel (Subhadra Vahini) are also assisting in security of Women & Children in trains and stations
- During the year, RPF has retrieved 495 of luggages, 157 mobiles, 44 laptops, cash ₹ 6,97,028/- and gold ornaments and other articles valued ₹44,30,148/- (Total valued ₹ 1,16,64,835/-) and handed over to their owners under proper acknowledgement
- In addition to the above awareness programme RPF had introduced 4 Go Pro Camera Mounted RPF Dogs Squad, drone camera used a part of high-tech surveillance at 37 stations, cyber crime cell opened and helping hand provided towards the society during pandemic COVID-19



RPF personnel monitoring CCTV footage and Segway Patrolling System

Passenger Amenities

- **Station Improved:** New station building, Facade, Circulating Area, Beautification etc. has been done at 59 Railway stations
- **Adarsh stations:** 23 stations have been upgraded as Adarsh stations during last 7 years
- **Extension of platforms:** Extension of platforms and additional platforms were provided at 81 stations during last 6 years
- **Foot Over Bridges:** Foot Over Bridges at 89 stations were provided between 2014-21. To enhance the safety of rail users, Railways have decided to provide Foot Over Bridges at all the small stations.
  - Now, all the small stations including Passenger Halts of Odisha will get their first over bridge
- **Washable Aprons:** For better hygienic environment, 50 stations have been provided with Washable Aprons between 2014-21



Koraput Station to be developed as Adarsh Station



Extended Platform of Boinda Station



Foot Over Bridge at Sakhigopal



Washable Apron at Bhubaneswar

Passenger Amenities

- **Lifts & Escalators:** 30 Lifts have been provided at Bhubaneswar, Cuttack, Rourkela, Brahmapur, Bhadrak and Sambalpur. 18 Escalators have been installed at Bhubaneswar, Rourkela, Sambalpur, Cuttack, Brahmapur, Khurda Road and Jharsuguda
- **Automatic Sanitary Pad Vending Machine:** Automatic Sanitary Pad Vending Machines have been installed at Bhubaneswar, Khurda Road, Sambalpur, Cuttack, Bhadrak, Jajpur-Keonjhar Road, Dhenkanal, Rayagada, Balangir, Baragarh, Titilagarh stations.
  - This service has been extended in some important Express Trains also, first time in Indian Railways
- **Station Ticket Booking Sevak & Automated Ticket Vending Machine:** 139 Station Ticket Booking Sevak were provided during last 6 years. 44 Automated Ticket Vending Machines also provided at important stations
- **Water Vending Machine:** Water Vending Machines have been installed at about 94 locations at 21 stations of Odisha
- Divyangian toilets 21 nos. at 17 stations.



Escalator at Cuttack Station



Sanitary Pad Vending Machine



Automatic Ticket Vending Machine



Toilet for Divyang

Passenger Amenities

- **Air-Conditioned Waiting Halls:** All major Railway stations of Odisha have been provided with Air-Conditioned Waiting Halls
- **Battery Operated Vehicle:** Battery Operated Vehicles have been provided for Senior Citizens and Divyang-Jan at Bhubaneswar, Puri, Cuttack , Titlagarh, Kantabanji and Kesinga
- **Medicine Store:** Facilities of Medicine Store have been provided at Bhubaneswar and Puri stations
- **Food Plaza:** Food Plazas have been opened at Bhubaneswar, Puri, Cuttack, Jajpur-Keonjhar Road, Brahmapur, Rourkela, Jharsuguda and Sambalpur Railway stations
- **Portable Wheel Chair Ramp:** For convenience of Divyang Passengers, Portable Wheel Chair Ramp facilities are now available at important stations
  - This facility has been provided at Bhubaneswar, Sambalpur, Titlagarh, Kantabanji, Puri, Brahmapur, Cuttack, Khurda Road, Talcher, Bhadrak, Jajpour keonjhar Road stations and being extended to other stations
- **Utkrisht Coaches:** 14 Rakes have been upgraded under Project UTKRISHT



Air-Conditioned Waiting Hall at Rourkela Station



Portable Wheel Chair Ramp at Bhubaneswar

New Station Buildings



Malatipatpur



Haridaspur



Bhadrak



Bichhupali



Deobahal



Nayagarh Town



Bhubaneswar Second Entry



Bolgarh Road

Lockdown Freight Operation Performance

Freight Operations

Freight	Carrying in MT	No. of Trains
Coal	36.41	9464
Raw materials for steel plant	2.33	605
POL	0.85	372
Cement	0.22	75
Fertilizer	1.66	684
Foodgrain	1.01	366
Iron Ore	7.62	1778
Other	7.02	1864
Total	**62.60**	**17199**





Movement of Essential Commodities

Essential Commodity	Carrying in Tonnes
Medicine	31
Medical Equipment	20
Egg & Milk Products	211
Fish	825
Mango	4345
Fruits & Vegetables	31
Other commodities	674
Total Parcel carried	**6137**





Shramik Special : carrying migrant workers and stranded persons

No. of Trains

636
Trains



Sl. No.	Train	Nos.
01.	Inward	250
02.	Outward	14
03.	Through Passing	372
	Total	**636**

No. of Passengers

Sl. No.	Train	Nos.
01.	Inward	342325
02.	Outward	17824
	Total	**360149**



Innovations

Pre-Fabricated Residential Accommodation for Railway Staff



Pre-Fabricated Residential Building at Jakhapura

- 3 Storey Building built in record 4 months
- Environment Friendly
- Innovative method/durable construction with fire proofing

Micro-Tunnelling



Micro-Tunnelling process in progress at Bhubaneswar Station

- Micro-Tunnelling method has been used 1st time any where on entire Indian Railways to clear the logged water from Bhubaneswar Station Yard
- It has been done in 30 days without any traffic blockage without affecting train movement

Innovations

Venturi-System

VENTURI - Based Toilet Ventilation System in Coaches
(An effective step towards foul smell free toilets)

Salient Features:

- Effective evacuation of stale air and bed odour control in Bio-toilet fitted coaches
- Completely maintenance free
- Zero power consumption
- No dust ingress into toilet
- Cost effective with minimum investment

Intermediate Block Section

- To improve section capacity 3 Nos. of Intermediate Block Signaling (IBS) have been commissioned between Barpali-Bargarh Road, Titlagarh-Kesinga and Deogaon Road-Saintala

Waste to Energy Plant



Waste to Energy Plant at Carriage Repair Workshop, Mancheswar

- One 500 kg capacity Waste Management Plant has been set up at Carriage Repair Workshop, Mancheswar based upon a new technology known as 'Poly-Crack' technology

New Initiatives

Rail by Cycle

- Rail by Cycle - A novel mechanism to quickly travel on rail tracks for inspection, monitoring & urgent repairing of tracks
- Rail by Cycle can be used for patrolling, ensuring safety and security





MeD ROBO

- In the light of COVID-19 pandemic, ECoR Central Hospital at Mancheswar is now utilising an inhouse developed Medical Robot called Med Robo to assist hospital staff to serve COVID patients and to assist the management of medical wards in serving medicines, food and remote assistance, without any need for physical contact



Painting with Local Art Forms

❖ Bhubaneswar, Rairakhol, Jharsuguda, Sambalpur, Puri and Jajpur-Keonjhar Road Railway stations have recently carried out wall paintings with exclusive, exquisite and artistic masterpieces, each a visual treat





Bhubaneswar Railway Station



Brahmapur Railway Station





Jharsuguda Railway Station

Green Initiatives

- **Water Treatment Plant**: In order to prevent water & soil pollution, Effluent Water Treatment Plants have been installed
  - Provided at coaching depots at Puri, Bhubaneswar, Carriage Repair Shop/ Mancheswar, Central Railway Hospital / Mancheswar & Railway Hospital / Khurda Road
- **Water Recycling Plants (WRP)**: Installed at Railway colony, Khurda Road and Railkunj, Bhubaneswar
- **Sewerage Treatment Plants (STPs)**: Installed at Central Hospital, Mancheswar, Khurda Road Railway hospital, Rail Kunj/ Bhubaneswar
  - STPs are also being installed at Sambalpur Railway Station and Sambalpur Railway Hospital
  - To conserve water, Automatic Coach Washing plant installation work at coaching depot, Puri is in progress
  - Another plant will come up soon at coaching depot Bhubaneswar
- **Solid Waste Management**: Containerized Organic Waste Treatment Plants have been installed at Cuttack, Bhubaneswar and Puri
  - One compositing plant has been sanctioned for Sambalpur Station
  - One 500 Kg Containerized Organic Waste Processing Plant has been installed at railway premises, Cuttack towards Muncipal Waste Management



Effluent Water Treatment Plant



Water Recycling Plant



Rain Water Harvesting

Green Initiatives

- **Bottle Recycling Machine:** Bottle Recycling Machines have been installed
  - Bhubaneswar, Puri, Cuttack, Sambalpur, Brahmapur, Kesinga, Titlagar, Bolangir, Rayagada Railway stations
  - These have been installed to avoid plastic garbage at the station premises and on tracks
- **Bio-Toilets:** Trains originating / terminating in Odisha are now 100% fitted with bio-toilets
  - Khurda Road - Puri Section has been declared as Green Train Corridor
  - All the trains running in this section will be provided with bio-toilets
- **Solar Energy:** 2 x 50 KWP Solar Power Plant has been installed at the roof top of Rail Sadan (Zonal HQ). 215.43 KWPM at Cuttack, Sambalpur & Mahasamud.
  - Solar Water Geysers have been provided in driver/guard running rooms at Puri and Angul
  - 12 solar penals installed at Baripada Station
  - Total 1164 KWP Solar modules provided for Solar Energy during last 6 years
  - 100 Nos. of 18W and 56 Nos. of 12 W have been provided at various Level Crossing Gates of Sambalpur Division



Bottle Recycling Machine at Puri Station



Bhubaneswar-Tirupati Express Train fitted with Bio-Toilets



Solar Power Plant at Khurdha

Digital India

Fast & Free Wi-Fi

- Fast & Free Wi-Fi facility has been extended at 168 stations over Odisha
- More than 40 railway stations are situated in Tribal / Remote areas





Use of Free Wi-Fi facility at Sakhigopal Railway Station

Digital Transactions

- Cashless transactions can be made through digital payment app and POS machines at major stations
- 198 PoS machines have been provided at 125 locations over railway stations in Odisha



Issue of Ticket through PoS machine at Puri Railway Station

Digital India

Electronic Chart Display Board

- For the convenience of the passengers, Electronic Reservation Chart display boards have been provided at Bhubaneswar, Puri and Cuttack railway stations. Will be extended to other railway stations shortly



Electronic Chart Display Board at Cuttack Railway Station

E-Catering and Online booking of Retiring Room

- E-catering facility for online booking of catering services has been introduced at important stations and in trains
- Online booking of Retiring Rooms and Dormitories has been introduced at all important stations of Odisha



AC Dormitory at Bhubaneswar Station

Healthcare Related Initiatives during COVID-19

- Fight against the COVID-19 is still on and ECoR continues to play a significant role in transporting essential commodities
  - ECoR has transported 0.97 MT of Food grains as against 0.72 MT, which is an improvement of 34.7% more than that of last year
- Operation of 636 Shramik Special Trains enabling the movement of 3,60,149 no. of passengers
- Ever best Freight Trains average speed of 40 Km/hr has achieved surpassing the previous best of 24.8 Km/hr
- Initiative taken through BDU, 0.38 MT of additional traffic has been transported by rail and earned ₹ 36.78 Cr.
- 261 No. of coaches have been converted into Covid Care Coaches and are kept at different stations
- Touch Free Hand Sanitizers Dispensing Machine, Thermal scanning machine, Currency Sanitizer Machines have been supplied at important stations









Capacity Enhancement

MEMU Shed at Khurda Road



Newly constructed MEMU Shed at Khurda Road

- Mainline Electric Multiple Unit (MEMU) Shed construction completed at Khurda Road to provide maintenance facility for MEMU trains
- Conventional coaches of seven rakes of passenger trains have been replaced with modern MEMU rakes. Each MEMU rake consists of 12 coaches

Mechanised BOOT Laundry at Sambalpur



- To provide good quality of washed linens for the comfort & satisfaction of passengers during train journey, a Boot Model Mechanised Laundry has been provided at Sambalpur coaching depot at a cost of ₹ 6.45 Cr.
- Very soon, BOOT Laundry facility will be provided at Bhubaneswar and Puri also

Road Ahead



Completion of all major ongoing Railway projects

Improvement of customer interface

Double Line Track on all important Routes

Completely Electrified Network

New Range of Train Services

Modern Station Buildings with State of the Art Passenger Amenities

COVID 19 *Initiatives & Efforts*

















वंदे भारत
EXPRESS