



# INDIAN RAILWAYS

## CONTRIBUTION TO SOCIO-ECONOMIC DEVELOPMENT AND ENVIRONMENTALLY SUSTAINABLE TRANSPORT

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# INDIAN RAILWAYS – ONE OF THE LARGEST



- Over 64000 route km, 1,13,500 track km in three gauges – BG, MG, NG
- Passengers: 7 million a day, 2.6 billion a year
- Freight approaching 1 billion tonnes
- 50,000 passenger cars, 2,20,000 freight cars
- Nearly 9000 locomotives
- Indigenous manufacture and R&D
- Profit making – also meets social responsibilities

**Even though the Indian Railways connect every corner of the nation, the network continue to expand and connect**



# A WIDE ARRAY OF SERVICES



Indian Railways services range from those for the discerning and rich to the commonest of people. We connect long distances and serve the urban commuters alike.

**The most important thing – we connect India like none else.**



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# CONNECTING INDIA

WE CONNECT IN MORE WAYS THAN ONE

- CONNECTING GEOGRAPHICALLY
- CONNECTING BY ENABLING
- BY REPAYING THE SOCIAL DEBT



IN ENVIRONMENTALLY  
SUSTAINABLE WAYS

# WE COVER THE LAND LIKE NONE

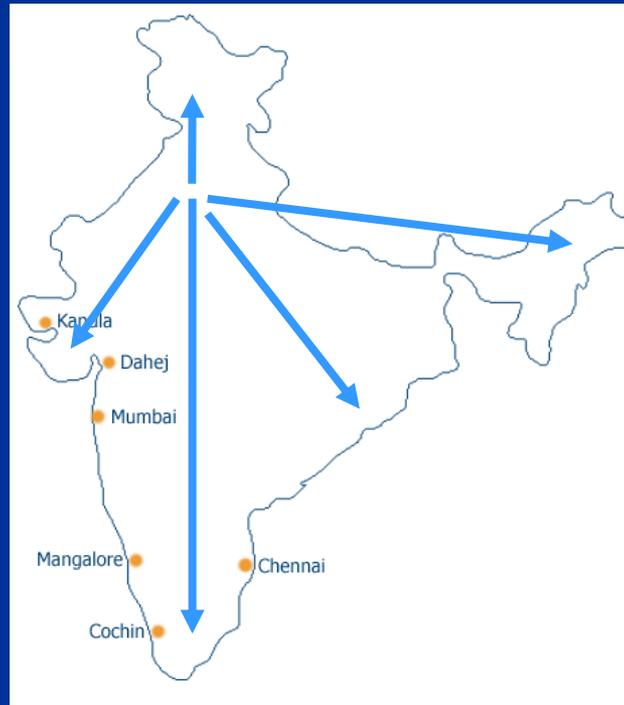


**Indian Railways are as diverse in their operations and services as the kaleidoscope that is India.**

**We bridge the distances and we bridge the divide.**



# CONNECTING THE REMOTEST CORNERS





# NOT ON FINANCIAL RETURNS ALONE

- Indian Railways undertake regional connectivity on socio-economic considerations
- Many of these projects and lines are not financially viable
- Taken up to serve the backward and less developed regions
- Divided into following categories:
  - **SOCIO-ECONOMIC CONSIDERATIONS**
  - **NATIONAL PROJECTS**
  - **COST SHARING WITH OTHER STAKE HOLDERS**



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# ON SOCIO-ECONOMIC CONSIDERATIONS



1	Abohar-Tohana via Fatehabad
2	Ajmer-Kota
3	Almatti - Yadgir
4	Amethi-Shahganj via Sultanpur
5	Bahadurgarh-Jhajjar
6	Barajamda-Tatina
7	Baramulla-Kupwara
8	Baran-Shivpuri
9	Barpeta Road-Tihu.
10	Barwadih-Chirimiri
11	Beas-Kapurthala
12	Bhadrachallam-Kovvur
13	Bhadrachellam Rd (Kothagudem)-Vishakapatnam
14	Bhavnagar-Tarapore
15	Bhavnagar-Mahuva
16	Bhind-Orai-Mahoba
17	Bhojudih-Mohuda
18	Bilaspur to Leh via Kullu & Manali
19	Bilaspur-Rampur Bushahr
20	Biyavra Rajgarh-Bina
21	Chandigarh-Dehradun via Jagadhari
22	Chaparmukh-Dibrugarh
23	Dangri-Dhola
24	Daurala-Bijnor via Hastinapur
25	Dehradun-Kalsi
26	Devli-Tonk-Sakatpura
27	Dhule-Amalner
28	Dindigul-Kumli
29	Erumeli-Punalur-Trivendrum
30	Etah-Kasganj

31	Etawah-Mainpuri
32	Gadag-Harihar
33	Gua-Manoharapur
34	Gunupur-Theruvalli
35	Haldibari-Mekhliganj-Changrabandha
36	Hansdiha-Godda
37	Haridwar-Kotdwar-Ramnagar
38	Hasnabad-Pratapadityanagar
39	Hisar-Sirsa via Agroha, Fatehabad
40	Hyderabad-Gazwal-Siddipet-Sircilla-Jagityal
41	Jabalpur-Panna via Kundalpur, Damoh
42	Jagadhri-Paonta Sahib-Rajban
43	Jagdalpur-Dantewara
44	Jaggayyapet-Miryalgudda
45	Jaisalmer-Barmer
46	Jalna-Khamgaon
47	Jammu-Poonch via Akhnoor, Rajouri.
48	Jeyapore-Malkangiri
49	Jhajha-Girdih via Sonuchakai
50	Jhansi-Sawai Madhopur via Shivpuri, Sheopurkalan
51	Joghicha to Silchar via Panchratna
52	Jogindernagar to Mandi
53	Jolarpettai-Hossur via Krishnagiri
54	Kachiguda-Chityal
55	Kaithal-Karnal
56	Kandra-Namkom
57	Kathua-Basoli-Bhadarwah-Kishtwar
58	Kharagpur-Dhankuni
59	Kharhagola-Santhalpur
60	Krishna-Vikarabad
61	Lalabazar-Vairengte
62	Lekhapani-Kharsang

63	Lohardaga-Korba
64	Madurai-Kottayam
65	Madurai-Tuticorin
66	Mantralayam Road-Kurnool
67	Murkongsekk-Pasighat
68	Mysore-Medikere-Mangalore
69	Naginimora-Anguri
70	Navrangpur-Jeyapore
71	Nawadah-Giridih via Satgawan
72	Nizamabad-Ramagundam
73	Nokha-Sikar
74	Orai-Jalaun-Konch
75	Palwal-Alwar
76	Pandurangapuram-Bhadrachalam
77	Panipat-Meerut
78	Parwanoo-Darlaghat
79	Patiala-Jakhal/Narwana via Samana
80	Patiala-Kurushetra
81	Pattancheru - Adilabad
82	Pendra Rd-Korba/Gevra Rd
83	Phulbari-Berhampur
84	Port Blair-Diglipur
85	Puri-Konark
86	Pushkar-Merta
87	Qadian-Beas
88	Raigarh-Mand Colliery to Bhupdeopur
89	Raipur-Jharsuguda
90	Rameswaram-Dhanushkoti
91	Ramnagar-Chaukhutiya
92	Ramtek-Goteagaon via Sioni
93	Ranchi-Kandra
94	Rangpo-Gangtok
95	Rishikesh-Doiwala
96	Roorkee-Haridwar

97	Rupai-Parashuramkund via Mahadevpur, Namsai, Chingkhram
98	Salna-Khumtai
99	Sambhal-Gajraula
100	Sardarshahr-Hanumangarh
101	Sarthebari - Changsari
102	Sitapur-Bahraich
103	Somnath-Kodinar-Pipavav
104	Thalassery-Mysore
105	Tori-Chatra
106	Tuli-Tuli Road
107	Tumkur-Davangere
108	Udhampur/Katra - Bhairawah, Doda to Kishtwar
109	Una-Hoshiarpur
110	Una-Jaigon Doaba
111	Wardha-Katol
112	Warora-Umrer
113	Yamunanagar-Patiala
114	Zaheerabad-Secunderabad

New Lines being set-up purely to connect interiors and far flung areas.

No financial returns expected on such large investments

114 sections

10,600 kilometers

Rs. 695 billion (US\$ 15 billion)



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# NATIONAL PROJECTS

Name of the Project (s)	KMs
Azra-Byrnihat	30
Bhairabi-Sairang	51.38
Bogibeel bridge with linking lines between Dibrugarh and North Bank line	73
Dimapur-Kohima (Zubza)	88
Jiribam-Imphal Road (Tupul)	97.9
Sivok-Rangpo (Suppl.)	53
Kumarghat-Agartala (Completed)	109
Agartala-Sabroom	110
Lumding-Silchar including alignment between Migrendisa-Dittockchera and extension from Badarpur to Bhariagram	367
Rangia-Murkongselek alongwith linked fingers	510.33

**Projects to connect border areas so far ignored**

**Populations from far-flung areas now getting connected**

**10 sections**

**1490 kilometers**

**Rs. 159 billion  
(US\$ 3.6 billion)**



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# PILGRIMAGE

- i. Howrah-Gaya-Agra- Mathura- Vrindavan -New Delhi-Haridwar-Varanasi-Howrah
- ii. Howrah-Chennai- Puducherry- Madurai – Rameshwaram-Kanyakumari-Bangalore – Mysore – Chennai-Howrah
- iii. Howrah- Vizag- Hyderabad- Araku- Howrah
- iv. Howrah – Varanasi- Jammu Tawi- Amritsar- Haridwar- Mathura- Vrindavan- Allahabad- Howrah
- v. Howrah-Ajmer- Udaipur- Jodhpur- Bikaner- Jaipur- Howrah
- vi. Mumbai- Pune- Tirupati- Kancheepuram- Rameshwaram- Madurai- Kanyakumari-Pune- Mumbai
- vii. Pune-Jaipur-Nathdwara-Ranakpur-Jaipur-Mathura-Agra-Haridwar-Amritsar-Jammu Tawi-Pune
- viii. Pune-Ratnagiri-Goa-Bangalore-Mysore-Tirupati-Pune
- ix. Ahmedabad-Puri-Kolkata-Gangasagar-Varanasi-Allahabad-Indore-Omkareshwar-Ujjain-Ahmedabad
- x. Bhopal-Dwarka-Somnath-Udaipur-Ajmer-Jodhpur-Jaipur-Mathura-Vrindavan -Amritsar-Jammu Tawi-Bhopal
- xi. Bhopal-Tirupati-Kanchipuram-Rameshwaram-Madurai-Kanyakumari-Trivandrum-Cochin-Bhopal
- xii. Madurai-Chennai-Kopargaon-Mantralayam-Chennai-Madurai
- xiii. Madurai-Erode-Pune-Ujjain-Veraval-Nasik-Hyderabad-Chennai-Madurai
- xiv. Madurai-Chennai-Jaipur-Delhi-Mathura -Vrindavan -Allahabad-Varanasi-Gaya-Chennai-Madurai
- xv. Madurai-Varanasi-Gaya-Patna Sahib-Allahabad-Haridwar-Chandigarh-Kurukshetra-Amritsar-Delhi-Madurai
- xvi. Madurai-Mysore-Goa-Mumbai-Aurangabad-Hyderabad-Madurai

**Pilgrimage has bound the four corners of India since time immemorial.**

**A special inland tourism for pilgrimage exists in India like nowhere else and it exists across all religions.**

**These 16 train services are being introduced to reconnect the remote corners with each other.**



# CONNECTING BY ENABLING

We Connect Not Only Geographically  
but  
Also Economically and Socially





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# CONNECTING BY ENABLING

- Free monthly passes to Madarsa Students
- Izzat Pass – THE PASS TO DIGNITY – Unorganised labour, hawkers, for a month up to 100km for Rupees 25 per month (US\$ 0.60; THB 20)
- Ladies Special – Matribhumi Suburban Services for women (SALUTING THE MOTHER)
- Yuva Trains for the unemployed Youth – Rs 299 for 1500km
- **Red Ribbon Express** for creating awareness about HIV/AIDS in the far flung areas



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# TRAINS TO CONNECT THE FAR AND THE POOR

We Bridge the Distances of Geography and Incomes



## DURONTO EXPRESS

*The Quick One*

A first in superfast non-stop long distance train for connecting the far corners of the country

14 pairs running

## YUVA EXPRESS

*To Connect the Unemployed Youth*

Low Cost Long Distance Travel

INR 299 for up to 1500km

(US\$ 6.50 or THB 210.00)



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# TRAINS FOR SPECIAL NEEDS



## MATRIBHOOMI SPECIAL

LADIES-ONLY SUBURBAN  
TRAINS IN PEAK HOURS

SO THEY CAN TRAVEL WITH  
SAFETY AND DIGNITY

**KARMABHOOMI SPECIAL**  
*Unreserved Long Distance Train*

**FOR THE POOR AND  
UNORGANISED LABOUR**



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# GARIB RATH – THE CHARIOT OF THE POOR



## GARIB RATH

*Air-conditioned long distance  
travel for the poor*

**Nothing cheap about it!**

# CONNECTING THE KASHMIR VALLEY



*One of the most challenging railway projects ever – connects Kashmir with the Himalayan foothills.*

*Mooted as early as in 1898 for narrow gauge – now becoming a reality on Broad Gauge @ over \$13b – 345km.*

**Matched in complexity only by the Tibet Rail Link**

**Provides an all weather link to the Valley**

**Qazigund – Baramulla already functional.**

**DEMU's on 119 km route connect 13 stations**

**Eventually connects Jammu-Udhampur-Srinagar-Baramulla**



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# A RESURGENT INDIA – SPREAD THE WORD



**CELEBRATING THE COMMONWEALTH GAMES – THE LARGEST GAMES EVER HELD IN INDIA**

**TAKES SPORTS AWARENESS TO THE MASSES**

**FELICITATES GREATEST SPORTSMEN OF THE COUNTRY**



**TELLS THE IT-STORY OF INDIA**

**SHOWCASING THE PROWESS OF INDIA IN THE FIELD OF INFORMATION TECHNOLOGY**

**TAKES THE IDEA OF e-GOVERNANCE TO THE MASSES**



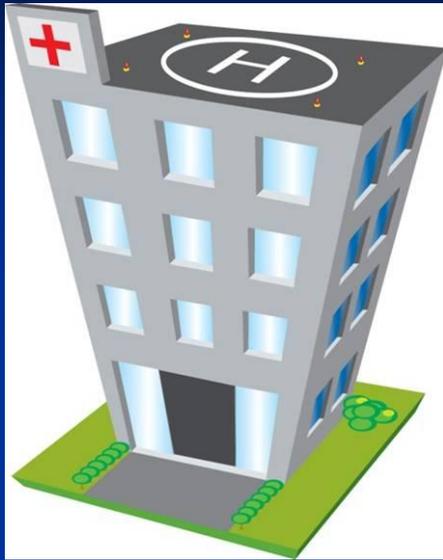
# THE SOCIAL RESPONSIBILITIES





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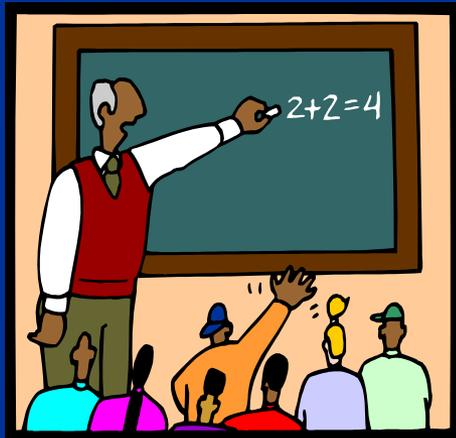
# REPAYING THE SOCIETY IN MANY WAYS



**SURPLUS RAILWAY LAND TO BE USED FOR SETTING UP**

- **381 PRIMARY HEALTH UNITS**
- **101 SECONDARY CARE HOSPITALS**
- **40 TERTIARY CARE HOSPITALS**

**IN COLLABORATION WITH MINISTRY OF HEALTH**



- **50 HIGH SCHOOLS**
- **10 RESIDENTIAL SCHOOLS**
- **MODEL GRADUATION COLLEGES**
- **TECHNICAL TRAINING CENTRES**

**IN COLLABORATION WITH MINISTRY OF HUMAN RESOURCE DEVELOPMENT.**



# JOINING THE CULTURAL THREAD



**A 5-CAR TRAIN ON THE OCCASION OF THE 150TH BIRTH ANNIVERSARY OF NOBEL LAUREATE GURUDEV RABINDRA NATH TAGORE**

## **THE SANSKRITI SPECIAL**

**REPRESENTS AND SPREADS THE WORD ON THE COMPOSITE CULTURE OF INDIA**

**DEPICTS THE ART AND WORKS OF NADALAL BOSE, ABANINDRA NATH TAGORE, BINOD BEHARI, RAMKINKER BEJ, SUDHIR KHASGIR AMONGST OTHERS**



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# The Green Ways of INDIAN RAILWAYS



# BIO DIESEL

- Trials with 10%, 20%, 50% and 100% substitution done. B10 and B20 look most promising.
- Bio Diesel not available in large quantities
- Setting up four in-house esterification plants of 30 tonnes per day capacity
- Procuring 50,000 KL to promote indigenous trade and technology
- Largest ever thrust in India
- Will give a major boost to Bio Diesel production and trade in India.



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# CNG SUBSTITUTION AND DUAL FUEL

- Trials with 10% substitution successful
- Orders placed for 25% substitution of Diesel by CNG on 10 Power Cars of Diesel Multiple Units
- Immediate plans for up to 65% substitution using HDPI technology on 100 Power Cars
- Plans to develop a gas turbine locomotive using CNG/LNG as fuel



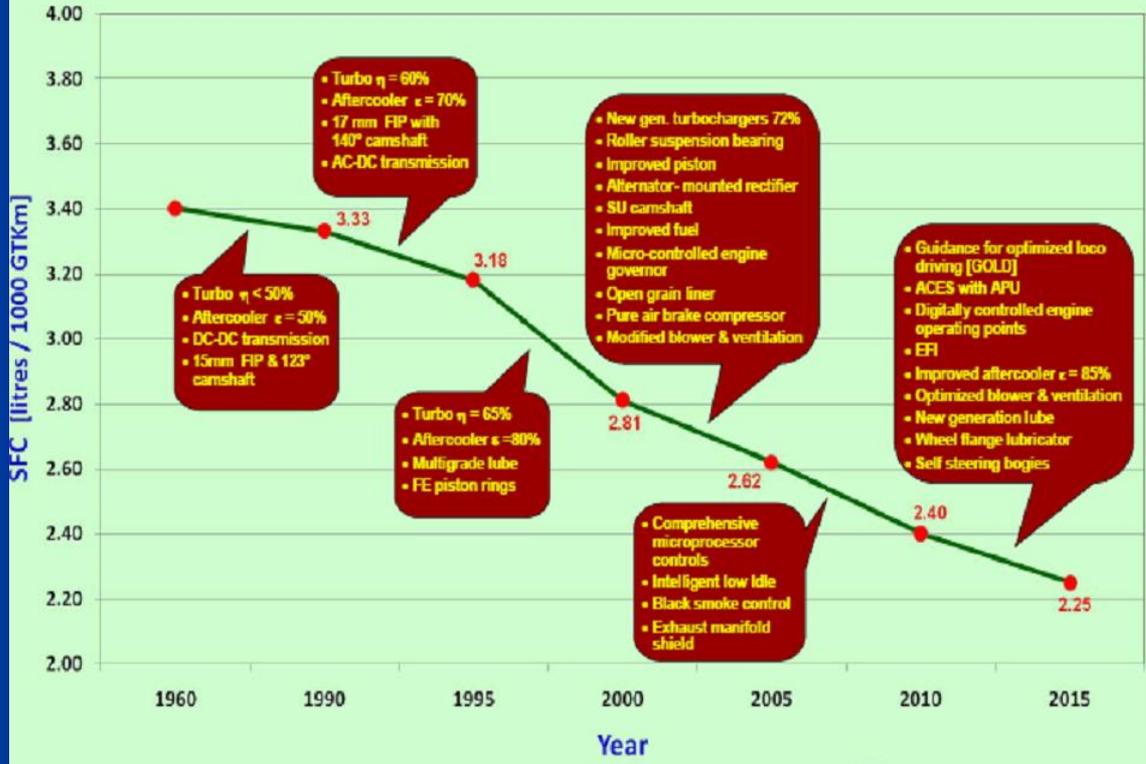


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# TECHNOLOGICAL UPGRADES

Fuel efficiency improvement on ALCo family freight locomotives  
[24% reduction achieved already; aiming at min. 30% reduction by 2015]



Continuous upgrade to Diesel Engine Technology has resulted in 30% Fuel economy in operations.

Saving nearly one billion liters of fuel per annum.

Saves 2.5 million tonnes of CO2 emission every year.

Further upgrades are underway.

Undertaking Projects on Gas Turbine Locomotives, Multi Genset Regenerative Locomotive – Further progress in GHG emission control



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# Thank You