

# Transport: Mumbai Suburban Railway

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# Connectivity through public transport

- Success of a mode of transport
- Types of transport
- Benefits of Railways

# Origin of Railways in Mumbai

- Started in 1853 at Mumbai during the British Rule
- Steam engines, coal were imported from Britain
- High traffic results in network expansion
- Engine loses steam and is phased out

# Electrification of the Railways

- DC traction to replace steam locomotive
- First contribution to green design
- Fuels migration from rural areas

# Current Scenario

- Covers 198 miles and runs on EMU
- Highly efficient wrt per person fuel consumption
- Real causes for high efficiency

# Issues faced by the Railways

- High passenger densities
- Low per person space requirements
- Daily casualties
- Slums along the railway line
- Existing DC is inefficient compared to AC

# Moving towards Sustainability-MRVC

- MUTP in 2 phases - \$650 million, supported by WB
- Expand network-add lines, efficient EMUs
- Qualify for carbon credits
- Resettlement and rehabilitation of residents
- Mangrove plantation around the city
- Rainwater harvesting at rehabilitated settlement

# Contribution to Green Design

- Metro Rail in 3 phases covering 91 miles
- Covers areas inaccessible to railway
- Asia's first Green Metro, LEED Certified
- Mono Rail covers 12.5 miles
- In dense residential areas
- Benefits

**Thank you!**