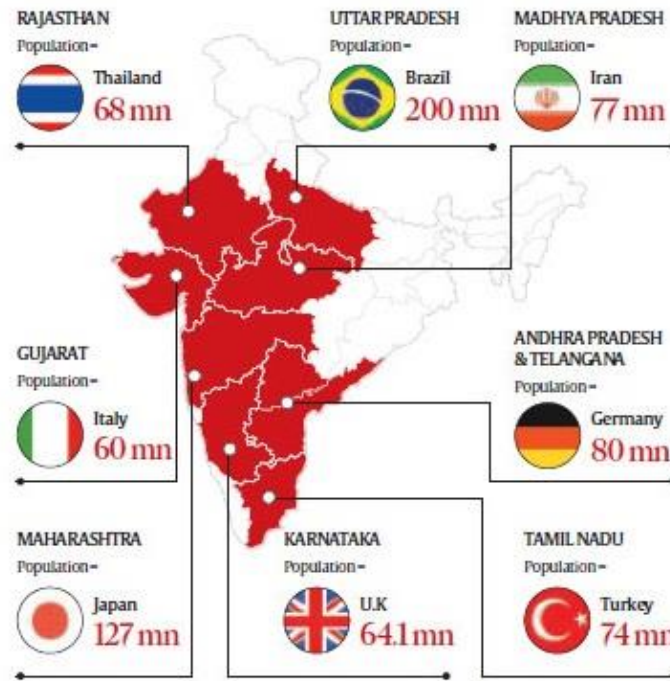


# “Smart Eco Mobility: Public Bicycle System integrated to the new metro system in Hyderabad, India”

**D V MANOHAR**  
Board Member, World Cycling Alliance  
Chairman, All India Cycling Federation  
Chairman, Hyderabad Cycling Club  
Chairman, Shri Shakti Group  
Past Chairman, Confederation of Indian Industry

## POPULATION EXPLOSION The City Dream

Depicted below are some major states with population equal to many leading countries



IN THESE STATES, MAJORITY OF THE POPULATION IS CONCENTRATED IN AND AROUND THE MAJOR URBAN CITIES.



INDIA'S ADDING  
A BRAZIL EVERY  
DECADE

**17.6%** = **181 mn**  
Decadal growth from 2001 to 2011  
Nearly equals the population of Brazil



# Govt. of India promoting 100 Smart cities





# How do we make our cities cycle friendly?



**Infrastructure is the key**



**General Perception that cycling is safe**



**Bike facilities**

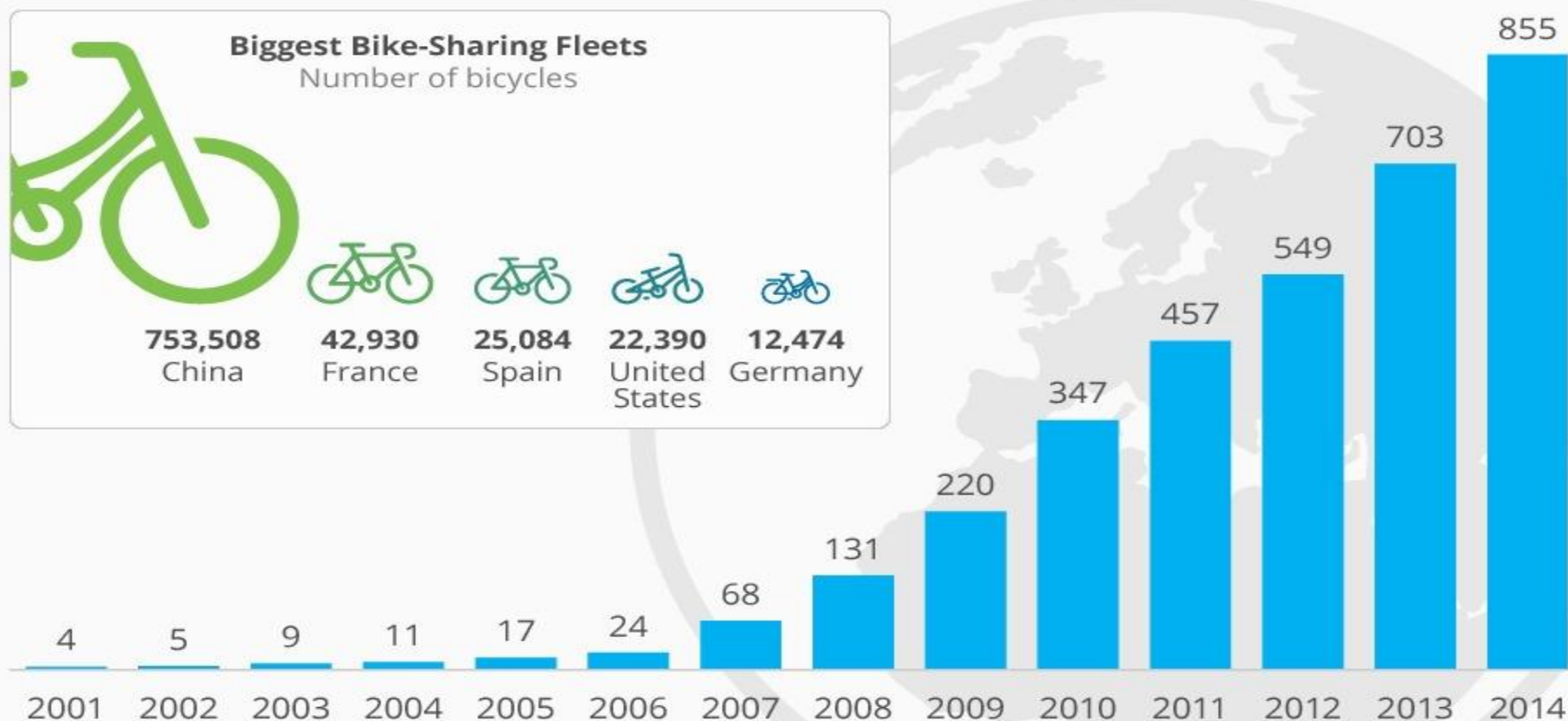


**Serious advocacy & social acceptance**

# Bike Sharing

## Bike-Sharing Is Taking Off Around the World

Number of cities worldwide that offer bike-sharing systems (as of December 31, 2014)



# Supporting Infrastructure

Cycle sharing systems can achieve greater success when complimented with dedicated infrastructure for cycling. These facilities can improve safety and convenience for all cyclists, including users of the cycle sharing system.

City	Bike infrastructure with Bike share System
Guangzhou, China	46 Km of segregated bike lanes
Paris, France	68 Km of segregated bike lanes in addition to 371 existing kilometres
London, United Kingdom	37.8 Km of 4 cycle superhighways
Barcelona, Spain	150 Km of segregated bike lanes
Boston, United States	80 Km of segregated bike lanes
Rio de Janeiro, Brazil	300 Km physically separated, painted lanes and signalized shared routes (either with traffic or pedestrians)



Population of 10 million



City of pearls



Tourism



IT Hub





## Member:



**Vision**

→ Making India →



**Mission**

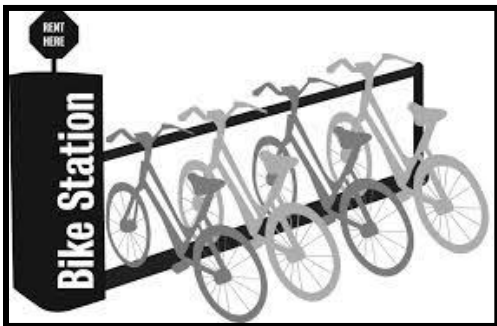
→ Changing Mindsets of people that cycle is not a poor man's vehicle

→



→ Creating infrastructure

→



# Tripartite MOU

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## **MEMORANDUM OF UNDERSTANDING**

**BETWEEN**

**THE HYDERABAD BYCYCLING CLUB**

**THE HYDERABAD METRO RAIL LIMITED**

**AND**

**THE UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME**

**TO**

**SETUP SOLAR CHARGED BIKE STATIONS TO PROVIDE LAST MILE CONNECTIVITY TO  
HYDERABAD METRO RAIL PROJECT**

# Task, Status & Target

Task	Status	Target
<p>10</p> <p>300 Bike Stations with a total inventory of 10000 bikes including e bikes in 63 Metro Stations along with feeder stations in residential &amp; commercial clusters.</p>	<p>Feasibility study and DPR in progress.</p> <p>Model/Demo Bike Station commissioned in October, 2016.</p>	<p>To complete the project fully by 2019.</p>





# Location of the bike station at each metro station



Right next to the escalator



# What makes HMR unique? Project Insights...

- To handle 1.8 million passengers per day by 2018 & 2.2 million per day by 2024.
- Total cost of US \$2.25 billion.
- Not a simple Metro, but an urban redesign & rejuvenation effort to transform Hyderabad into a people friendly green city.

This project with 10,000 bikes will generate around 20 million trips/year which will result in reduction of 2500 tons of CO<sup>2</sup>/year.

This project is a great fit under '100 SMART CITIES PROGRAM' of Govt. of India as it aims at promoting smart mobility with NMT through Public Bike Sharing.



## India's NDC commitments

Reduce emissions by 20% to 25% by 2020 below 2005 levels

Increase non-fossil capacity to 40% of installed electric power capacity by 2030







*Cycling is so difficult when you have to and so easy when you want to*



**THE SECRET WEAPON IN THE FIGHT AGAINST FOREIGN OIL IS **RUSTING** IN YOUR GARAGE**



*The bicycle is a simple solution to some of the world's most complicated problems.*



*Let's have a moment of silence for all those who are stuck in traffic on their way to the gym to ride stationary bicycles.*

