URBAN AGE CONFERENCE

GOVERNING URBAN FUTURES

November 2014

Amitabh Kant

Department of Industrial Policy and Promotion

The Delhi-Mumbai industrial corridor: creating location

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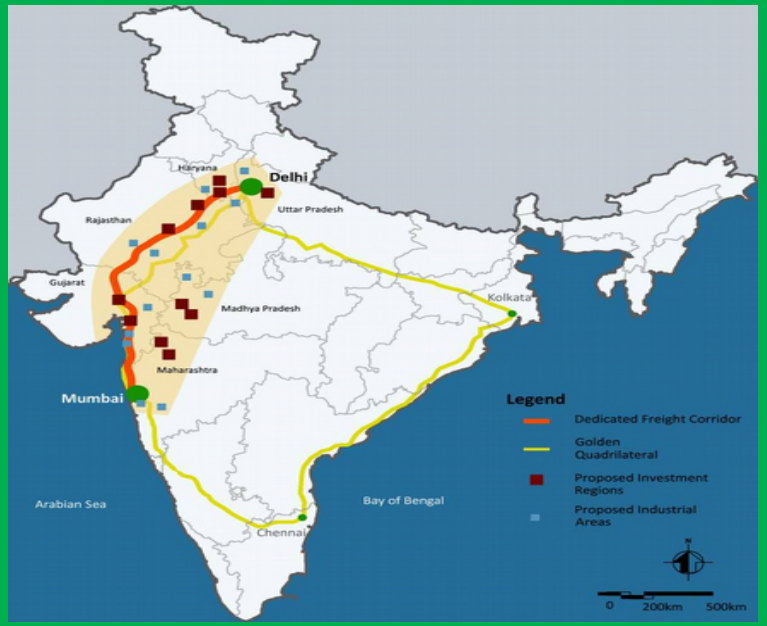
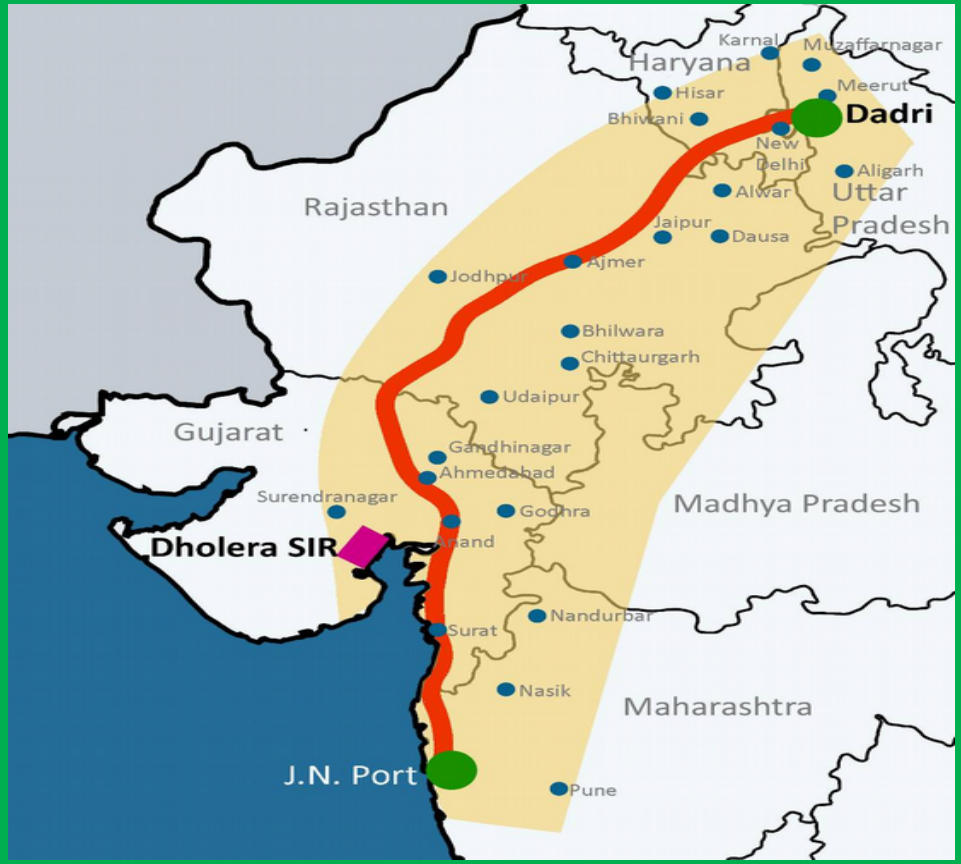
Delhi Mumbai Industrial Corridor Project

The DMIC Corridor





Cities will account for nearly 70% of India's GDP by 2030

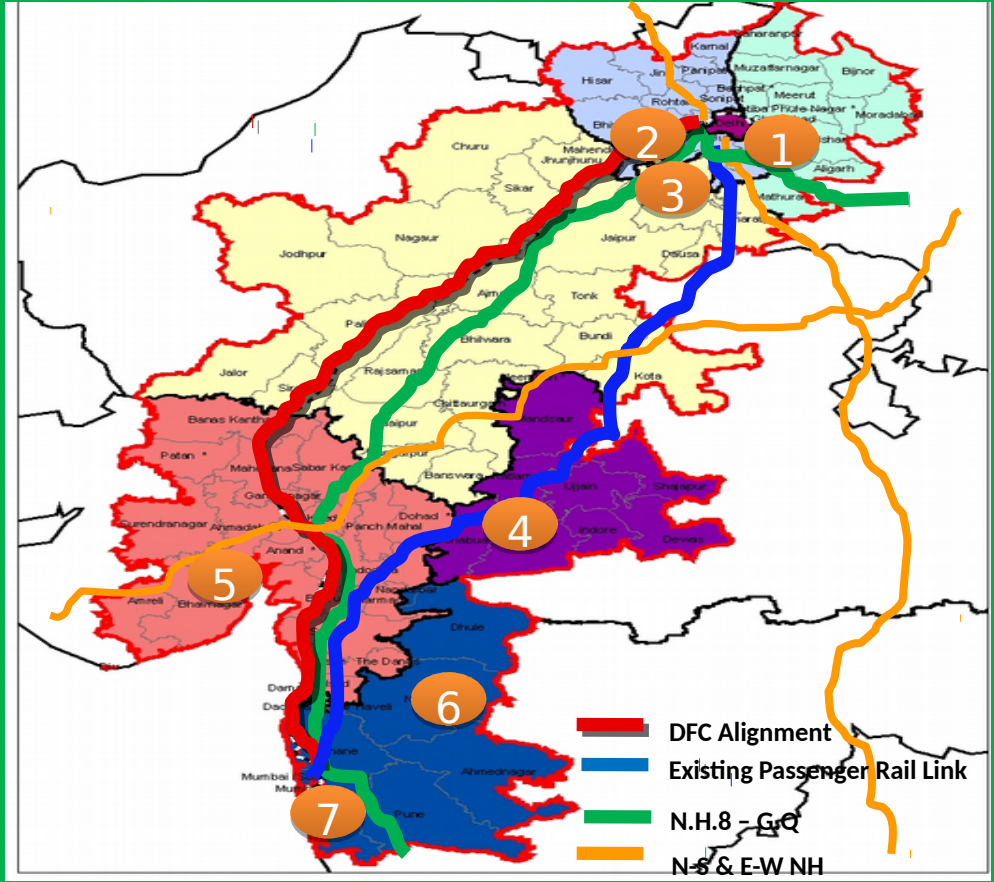
Share of India's GDP %; rupees billion, real 2008

Compound annual growth rate (%)	7.4	5.9	8.3
Share of growth (%)	100	28	72

New DMIC Cities will help to meet pressures of urbanisation and also lead India's economic growth for the next 20 years

Source: India's Urban Awakening: Building inclusive cities, sustaining economic growth - McKinsey Global Institute, April 2010

7 Nodes being developed in DMIC in Phase 1



1 Dadri – Noida Ghaziabad IR, UP

2 Manesar – Bawal IR, Haryana

3 Neemrana – Khushkhera – Bhiwadi IR, Rajasthan

4 Pithampur- Dhar - Mhow IR, MP

5 Ahmedabad – Dholera IR, Gujarat

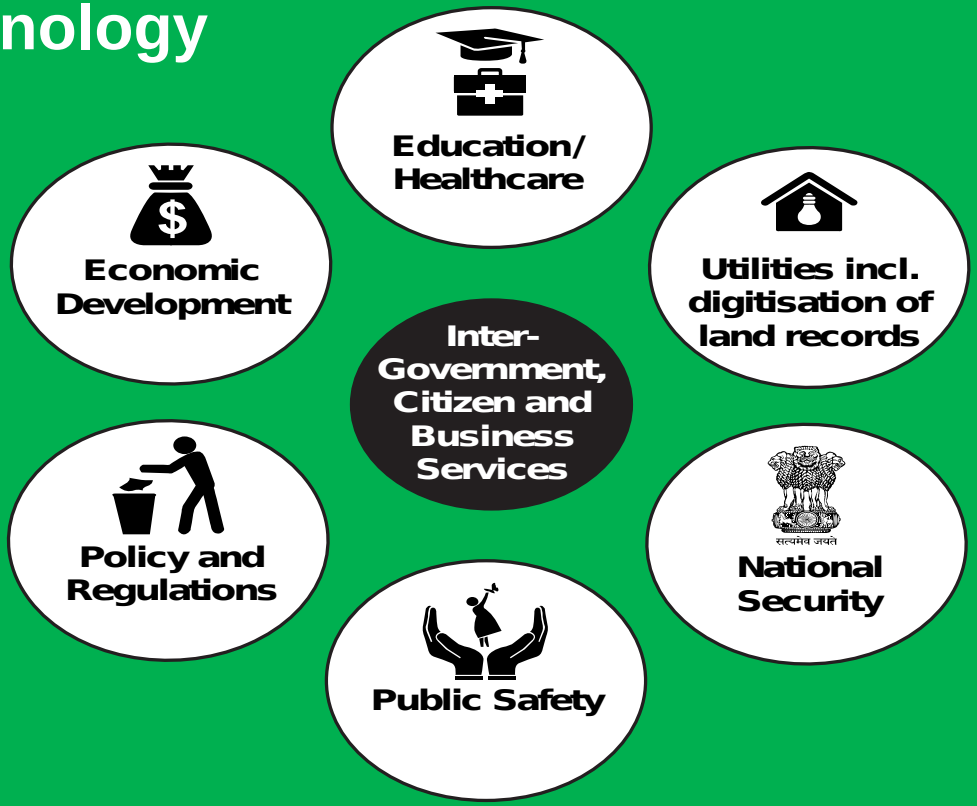
6 Nashik– Sinnar – Igatpuri IR, Maharashtra

7 Dighi Port IA, Maharashtra

Best practices in Master Planning being brought in through international consultants

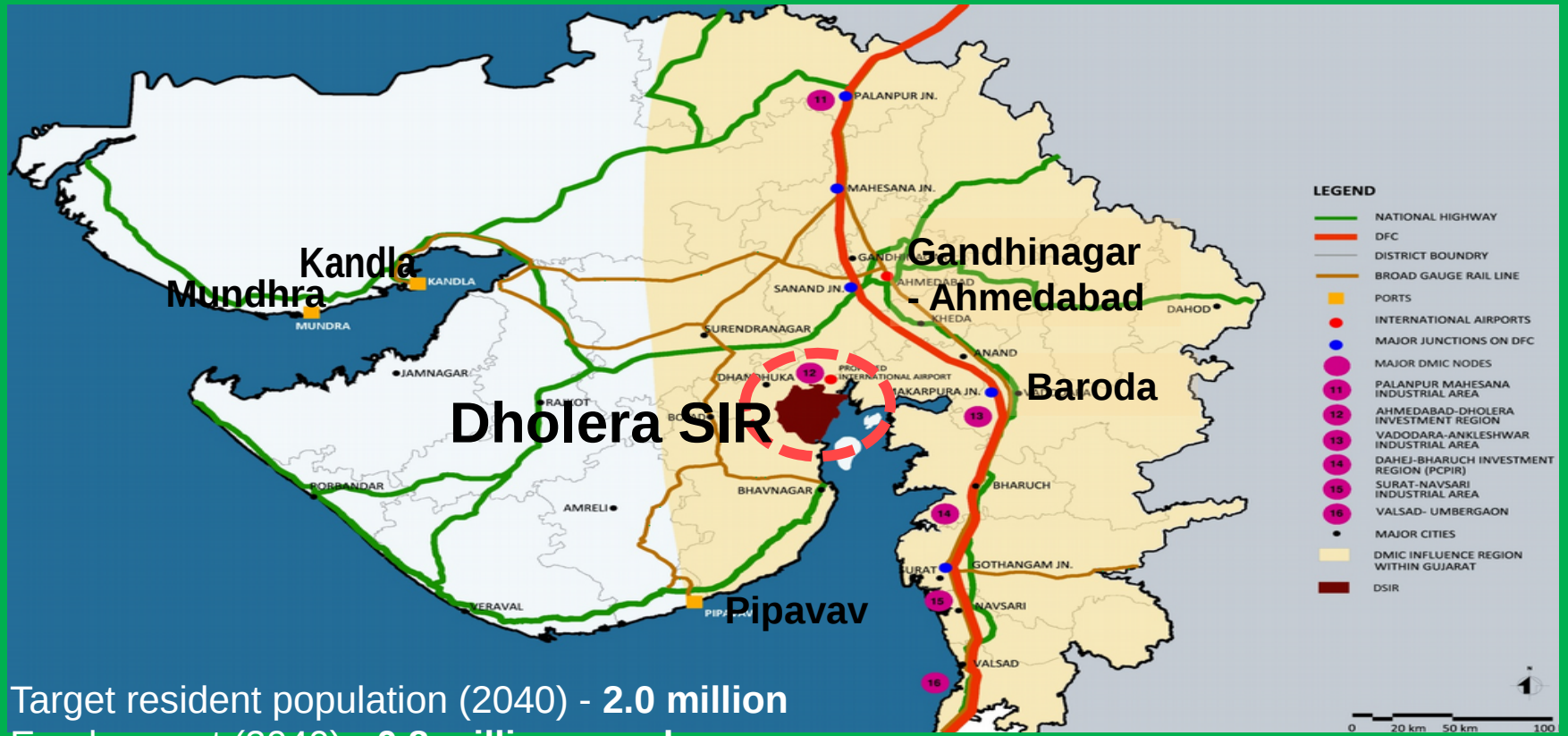
Node	Consultants	Area (sq. km)
Ahmedabad-Dholera Investment Region, Gujarat	**Consortium led by M/s Halcrow, UK**	**920**
Manesar-Bawal Investment Region, Haryana	**Consortium led by M/s Jurong, Singapore**	**402**
Khushkhera-Bhiwadi-Neemrana Investment Region, Rajasthan	**Consortium led by M/s Kuiper Compagnons, Holland**	**165**
Pithampur-Dhar-Mhow Investment Region, Madhya Pradesh	**Consortium led by M/s Lea Associates South Asia**	**372.4**
Dadri-Noida-Ghaziabad Investment Region, Uttar Pradesh	**Consortium led by M/s Halcrow, UK**	**200**
Dighi Port Industrial Area, Maharashtra	**M/s AECOM, Hong Kong**	**253**
Shendra Bidkin Industrial Park Maharashtra	**M/s AECOM, Hong Kong**	**84**

Cities are being developed as Smart Cities with use of Digital Technology



Information & Communications Technology

Dholera Special Investment Region

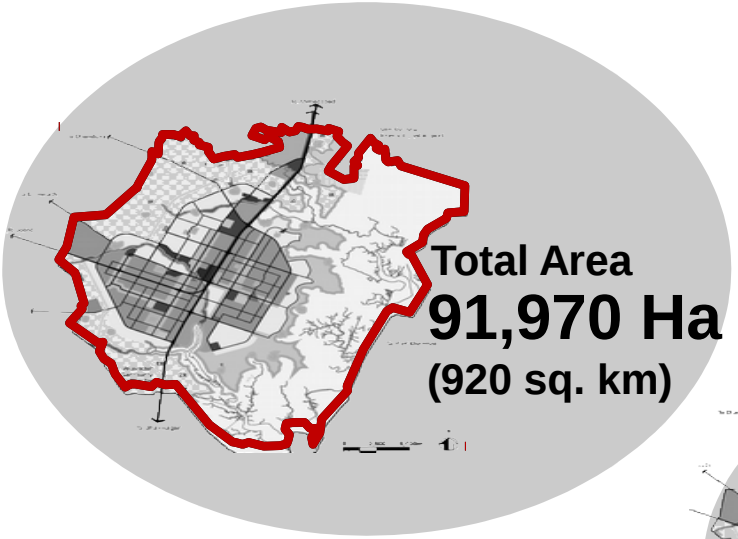


Target resident population (2040) - **2.0 million**
Employment (2040) - **0.8 million people**

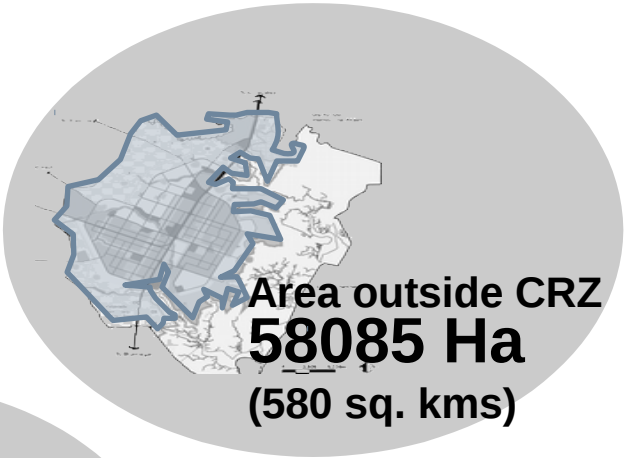
DMICDC

Dholera SIR: Key Indicators

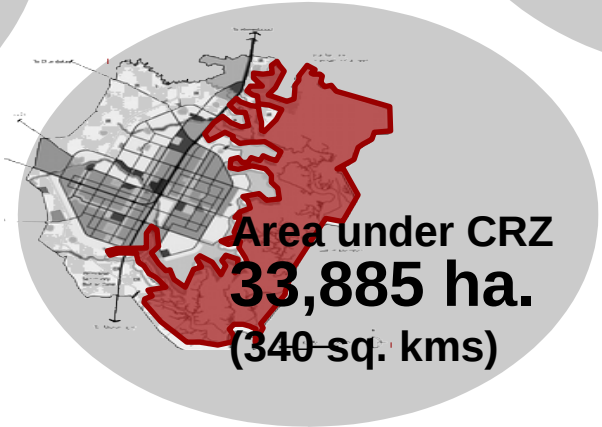
As per Development Plan



Total Area
91,970 Ha
(920 sq. km)

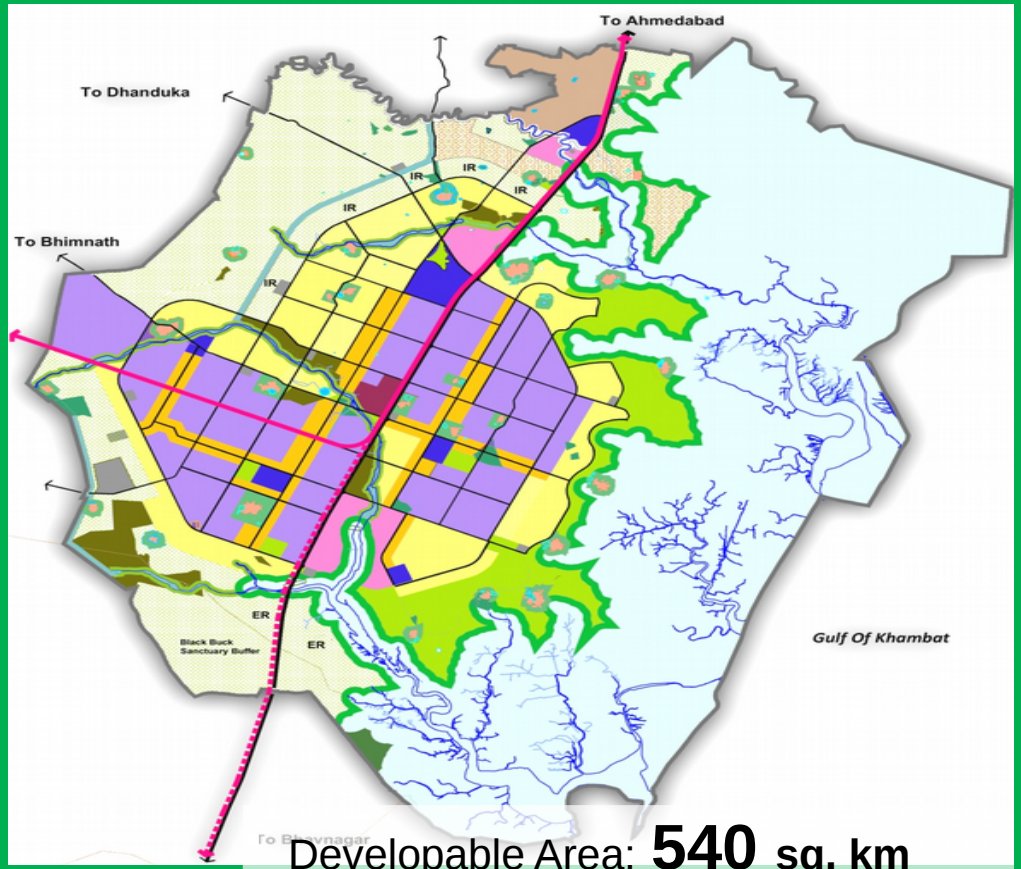


Area outside CRZ
58085 Ha
(580 sq. kms)

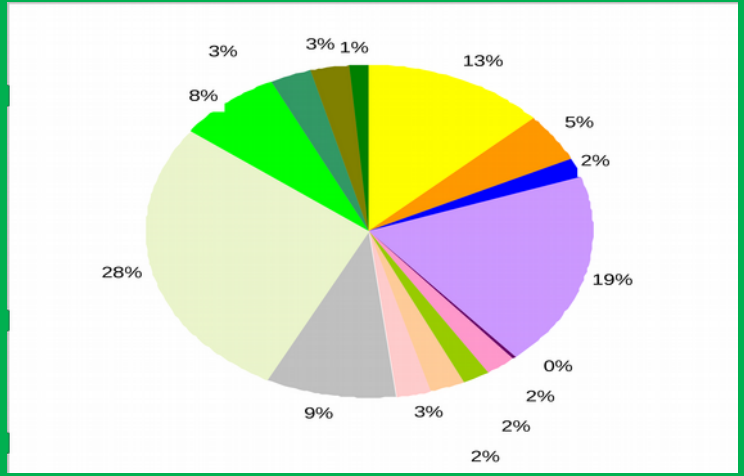


Area under CRZ
33,885 ha.
(340 sq. kms)

Master Plan



Developable Area: **540 sq. km**



Key

LAND USE

- Residential
- High Access Corridor
- City Centre
- Industrial
- Logistics
- Knowledge and IT
- Entertainment
- Village Buffer
- Green Parkland & Canals
- Recreation & Sports
- Resorts
- Solar Energy Park
- Strategic Infrastructure
- Forest
- Agriculture

OTHER

- DSIR Boundary
- Broad Gauge Railway
- Roads
- Land Under CRZ-I
- Canal
- Village Settlement
- Black Buck Sanctuary Buffer
- Rivers and Streams

Dholera SIR: Projections

Industrial, Tourism & other Jobs

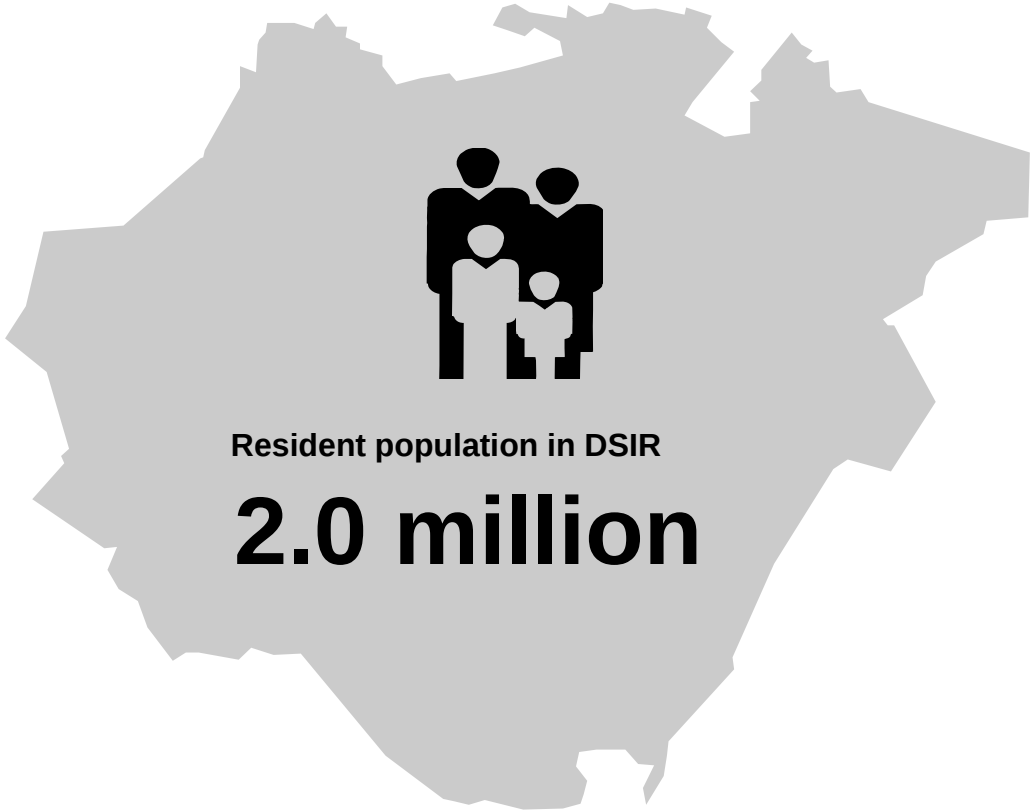
343,000

Supported Jobs

484,000

Total Jobs

827,000

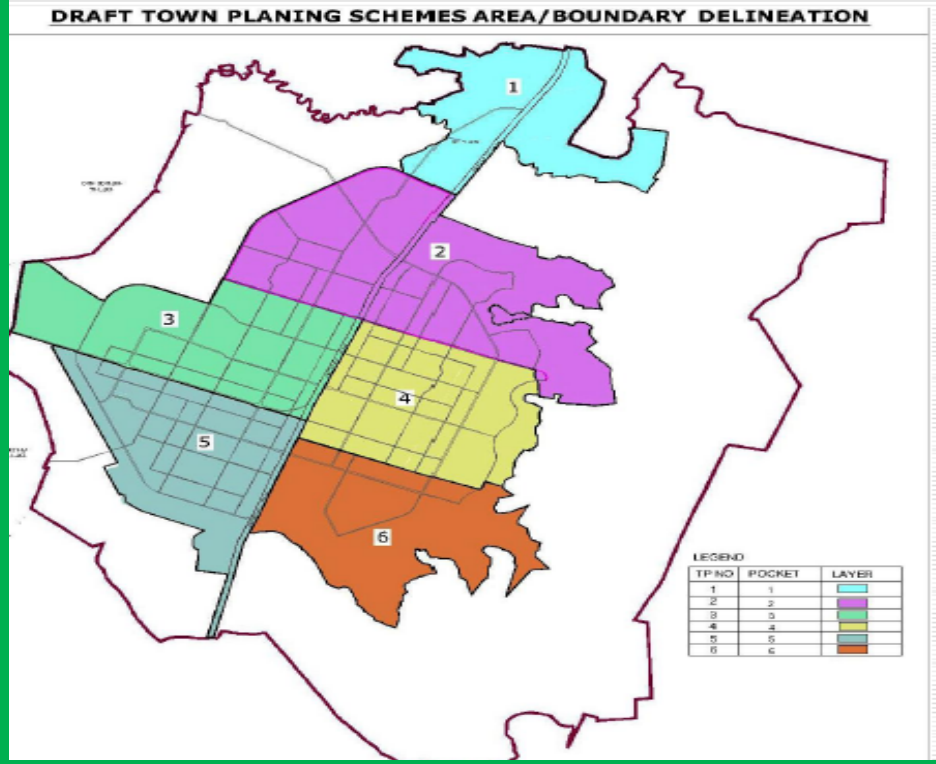


Resident population in DSIR

2.0 million

Draft Town Planning Scheme

DRAFT TOWN PLANNING SCHEME NO. 1 TO 6



Draft Town Planning Scheme Area Table

SR. NO	T.P.S NO.	AREA IN SQ. KM
1	1	51.28
2	2	103.00
3	3	67.06
4	4	59.85
5	5	63.00
6	6	62.40
Total		406.59

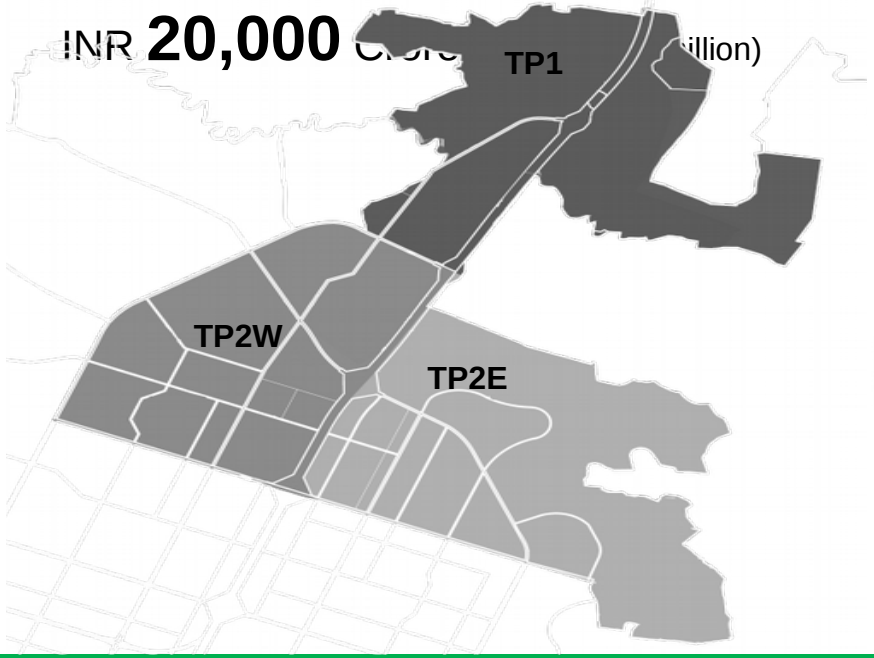
Phase -1 of Dholera

Area to be developed in phase 1a-

154 sq. kms

Validated Construction Cost (2013) ~

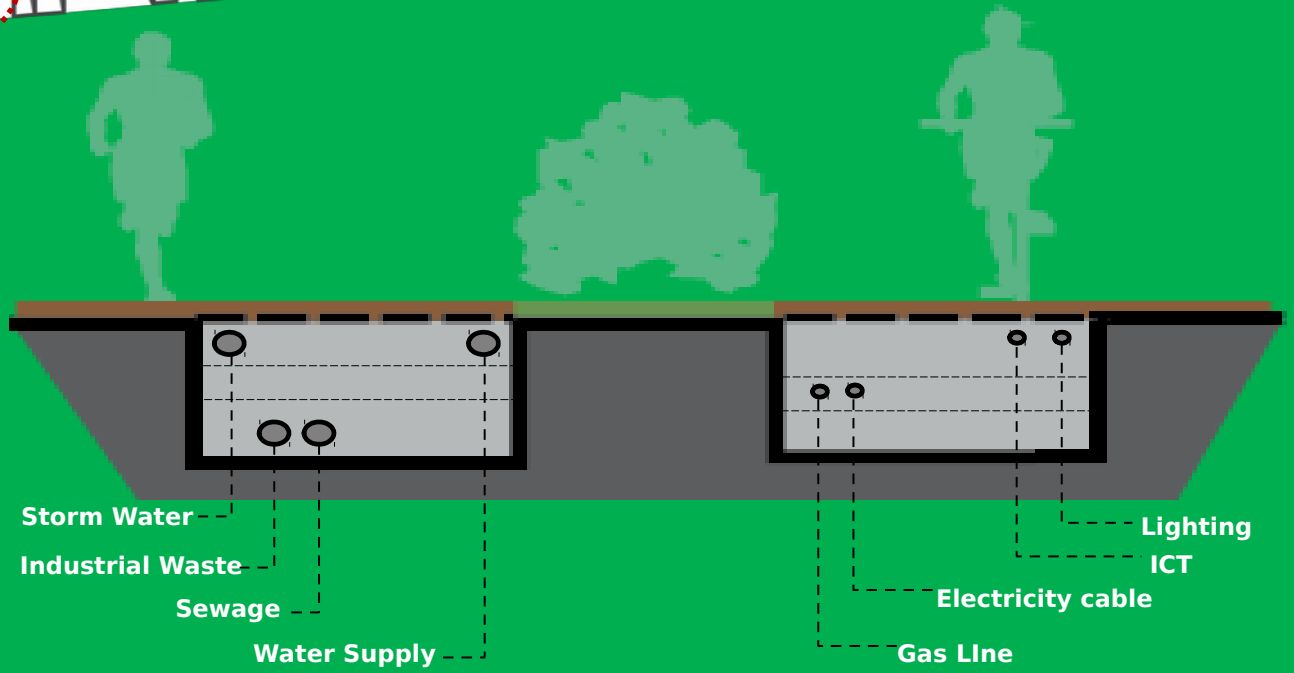
INR **20,000** C[illegible]illion)



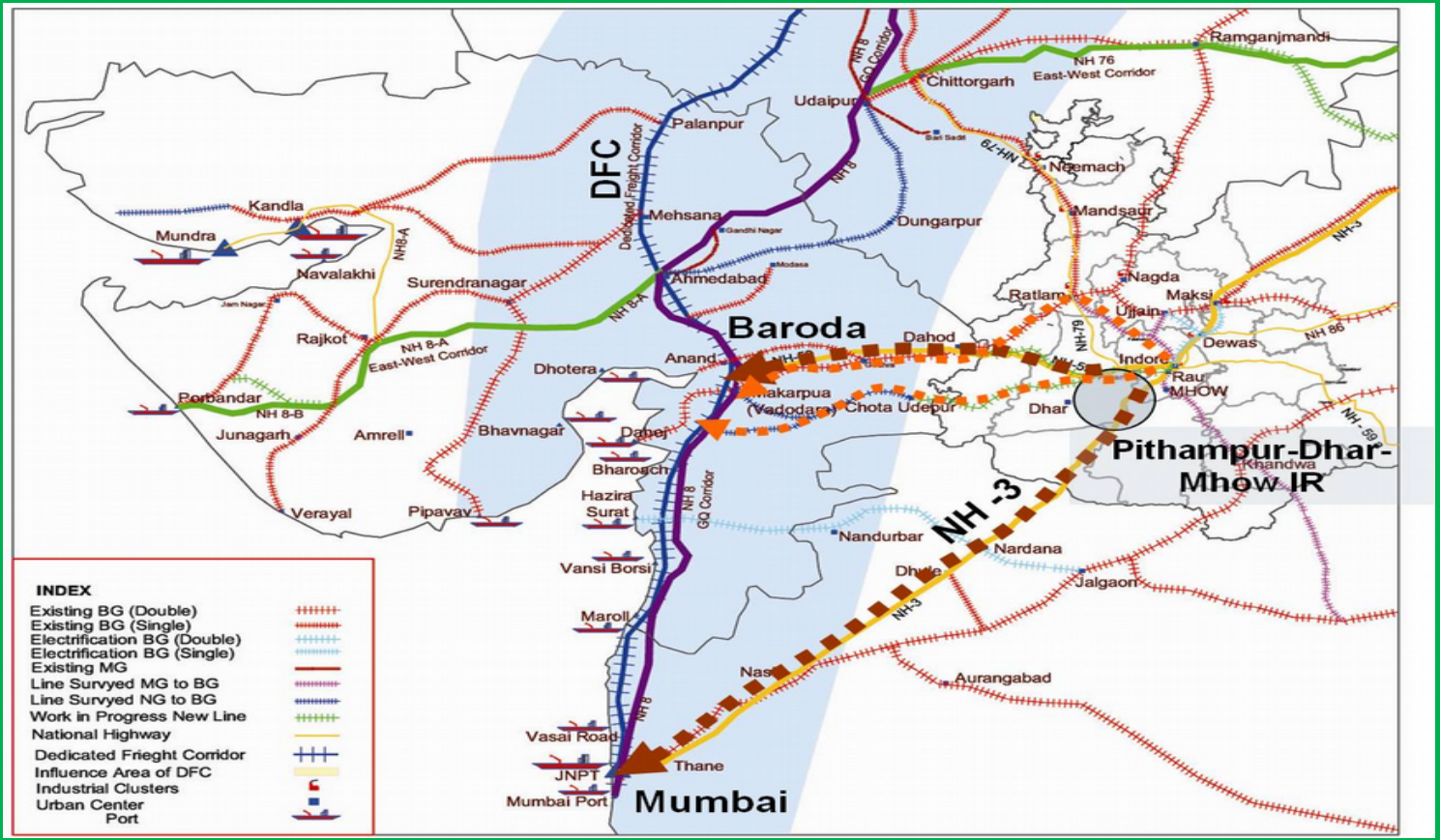
Base (Flat) Infrastructure Include:

- Roads and Utilities (TP 1 & 2) : 550 kms
- Potable Water: Raw Water Pipeline from Periej Dam and Water Treatment
- Sewage: CETP and STP (RecyclePlants)
- Industrial Water: Effluent Pipeline from AMC & Tertiary Treatment Plant
- Stormwater: Collection and Treatment
- Flood: River Training and Bunding
- Solid waste: Transfer and Treatment
- Power: Transmission and Distribution
- ICT: Networks
- Related Projects (RRTS/MRTS, Airport)

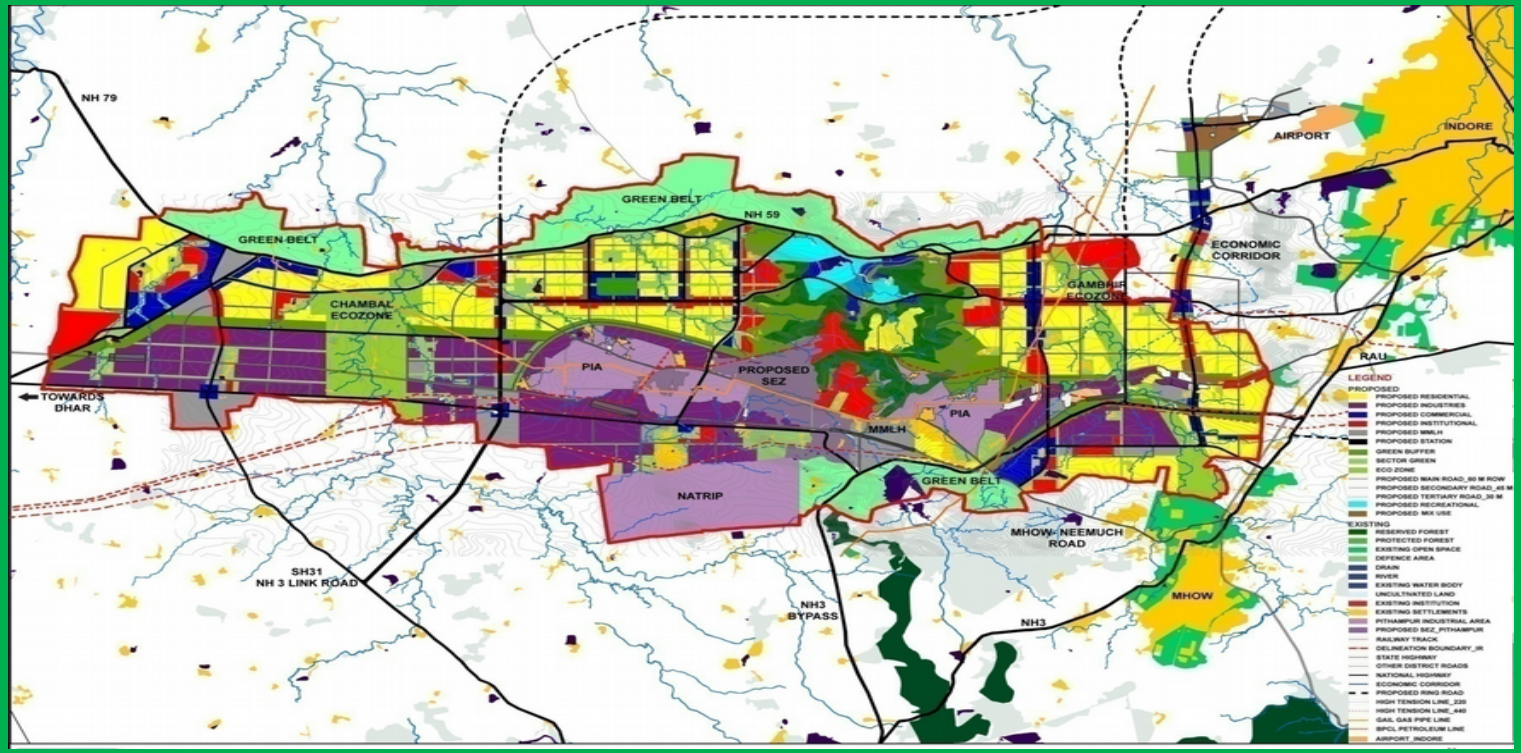
Typical detail of Utility Corridor



Pithampur-Dhar- Mhow IR



Pithampur-Dhar- Mhow – Master Plan

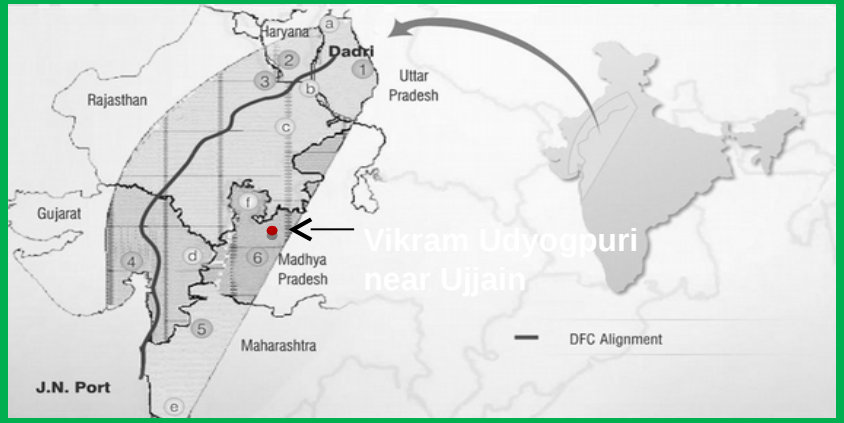


Residential
Commercial
Industrial
Institutional
Mixed Use
City Greens

Total Area – **372.4 sq. km** Population – **1.16 million**

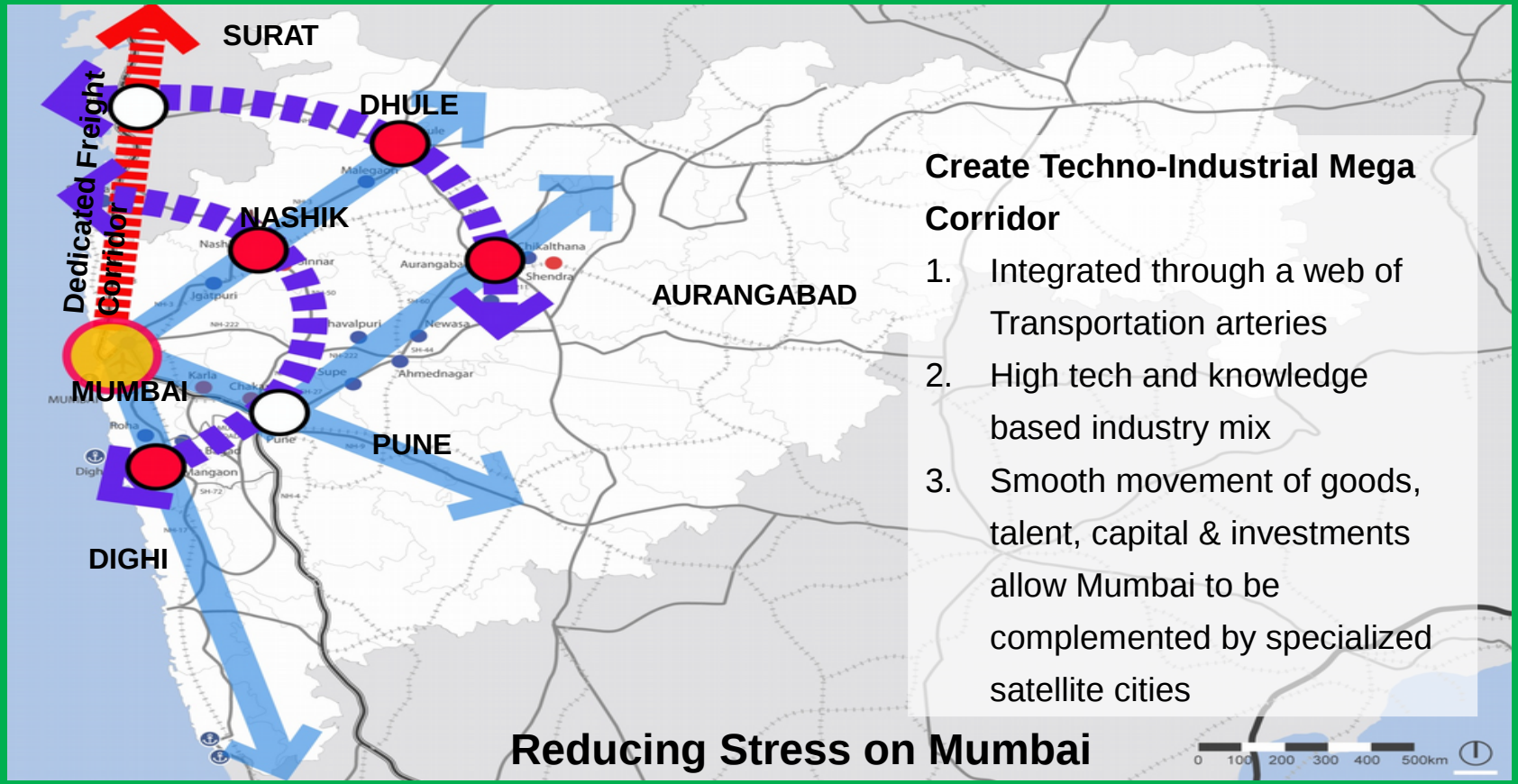
DMICDC

Vikram Udyogpuri



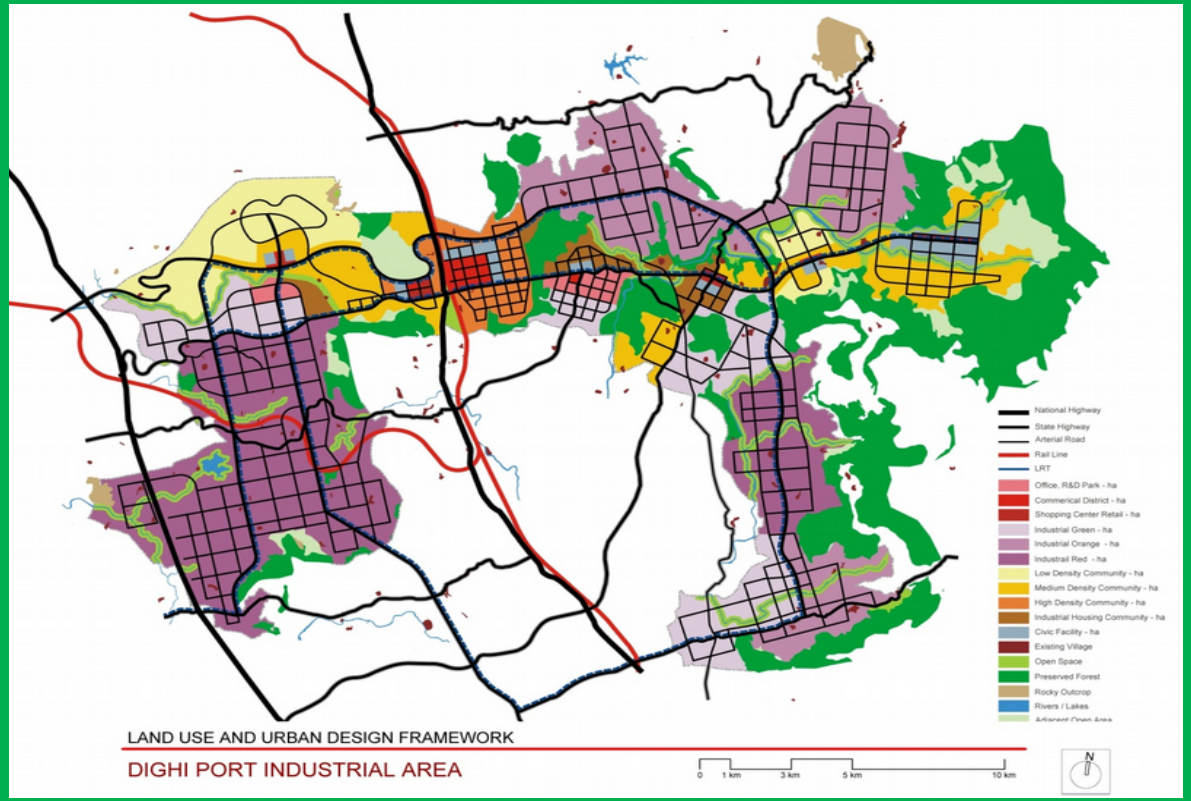
- Integrated Industrial Township (IIT) is an Early Bird Project to initiate industrial development for the takeoff of the Pithampur-Dhar-Mhow Investment Region while providing essential infrastructure and services to support establishment of institutions that would create a skilled and employable workforce
- The project is located about 8km from Ujjain and 12km from Dewas and has a total area of 443.79 Ha (1096.63 acres)

Philosophy - Decentralised Regional Development



Dighi Port Industrial Area

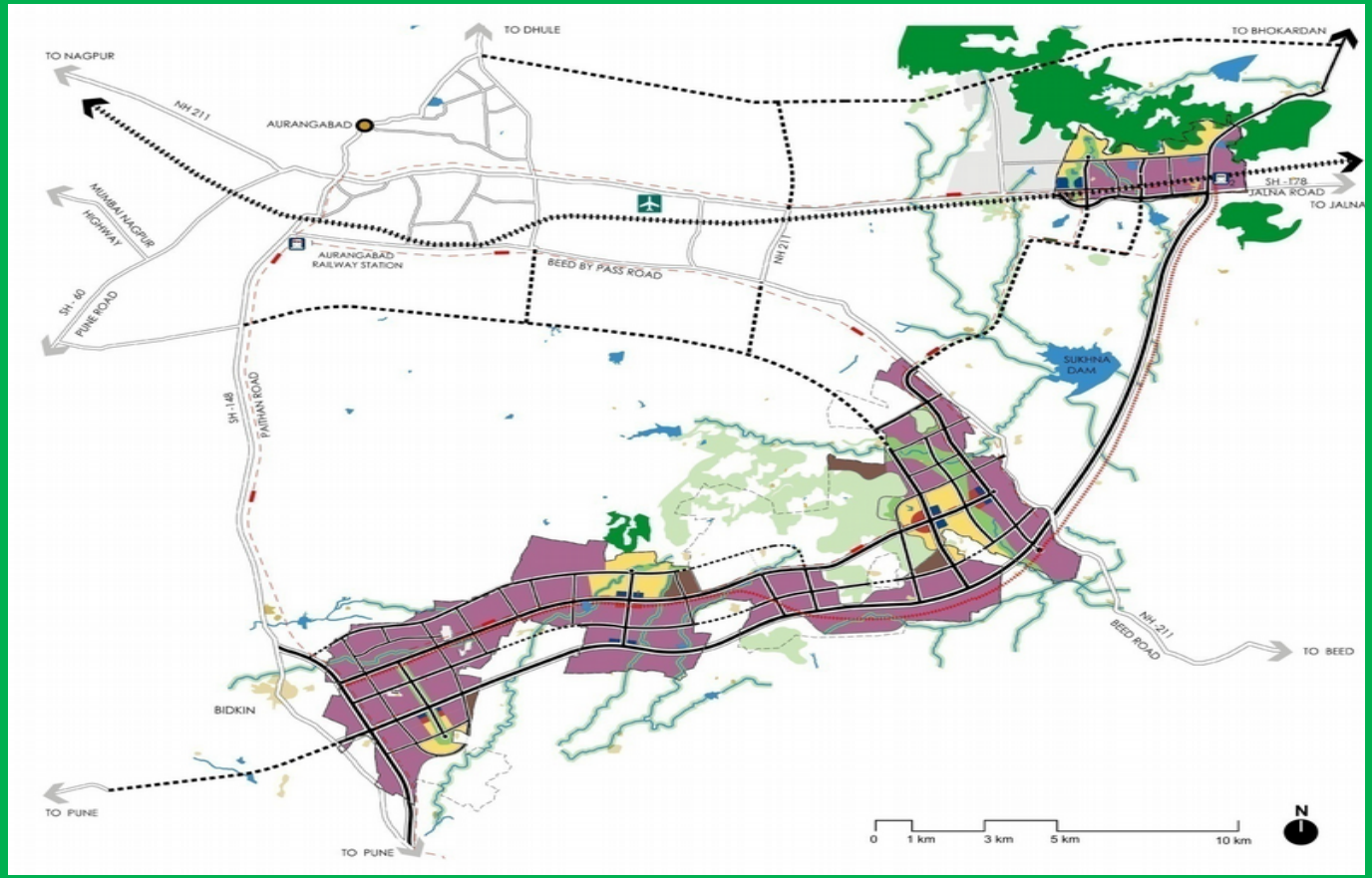
- Population (2042): 1.6 mn
- Total area: 253 sq. km
- Phase 1:50 Sq. km
- New integrated industrial and township enclave
  - 71% area under industries
  - Balance - residential & commercial use.
- Three major industrial clusters,
  - Engineering, Heavy Industry and Food Processing Park.
- Smaller, mixed-use centres in between



Shendra-Bidkin Industrial Park

Area: **84** sq. km

Population: **0.5** mn



DMICDC

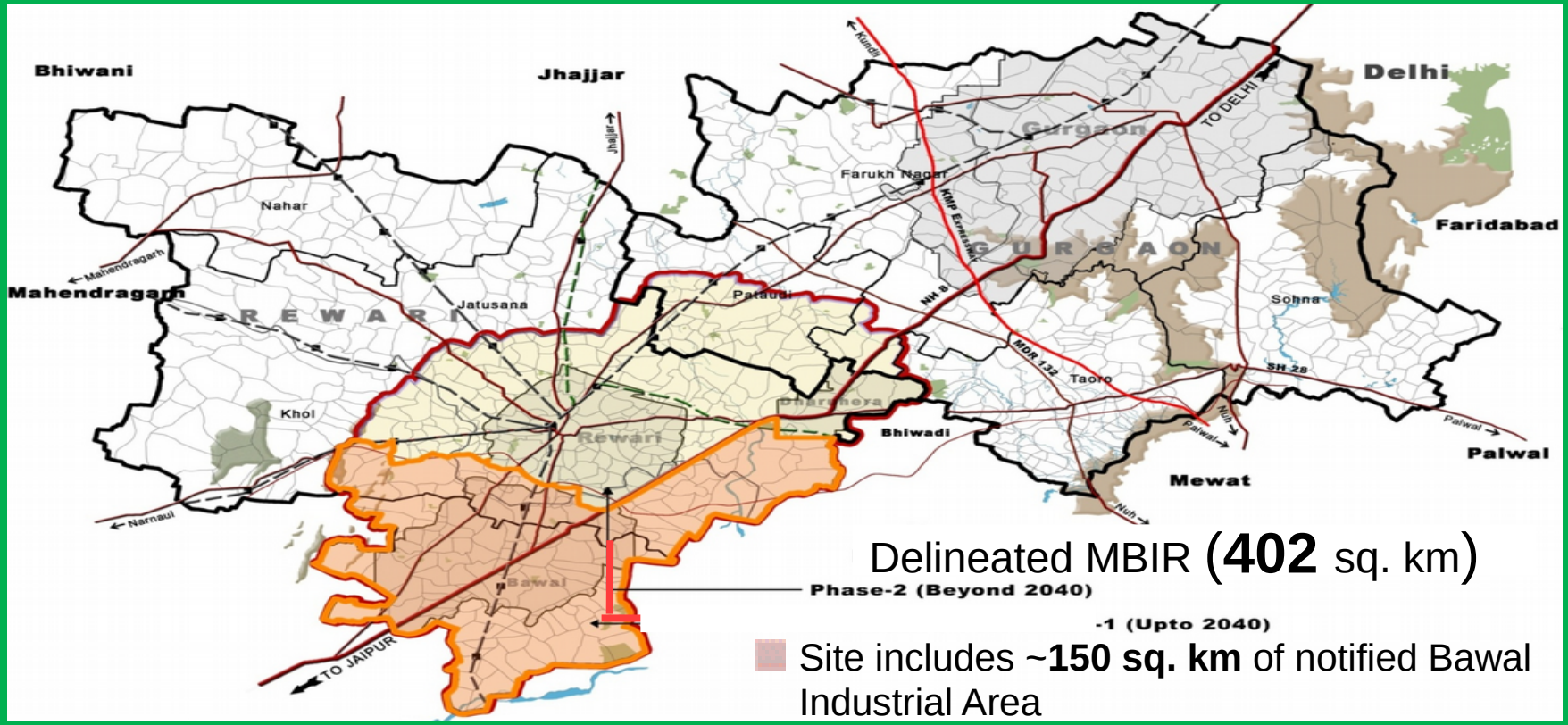
Phase – 1 of new industrial city at Shendra, Maharashtra (24 sq. kms)

Multi Modal Logistics Park at Karmad (125 acres)

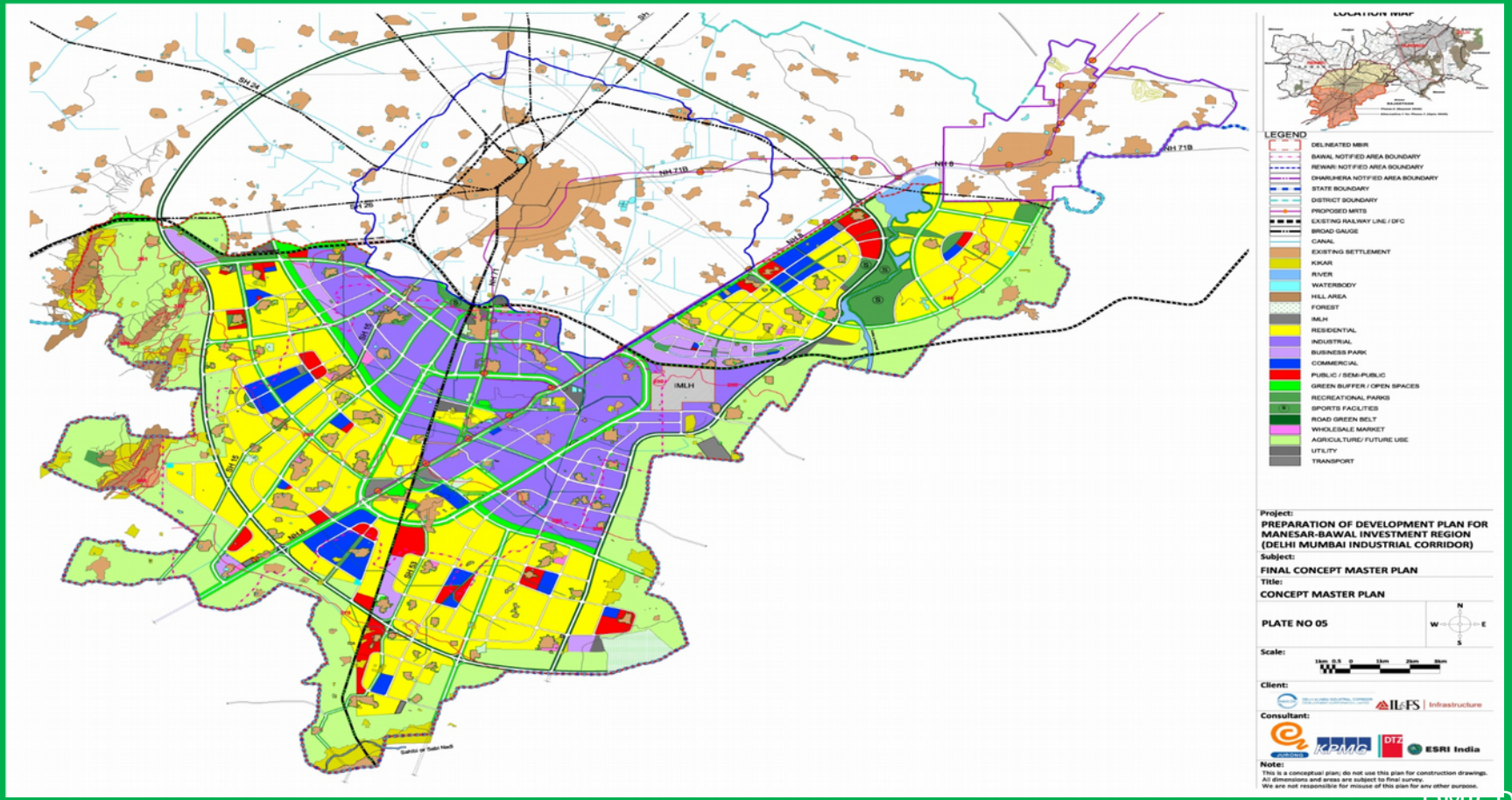
Water Supply Scheme for Shendra

Mixed used development over an area of 50 acres

Manesar – Bawal Investment Region



The Concept Master Plan



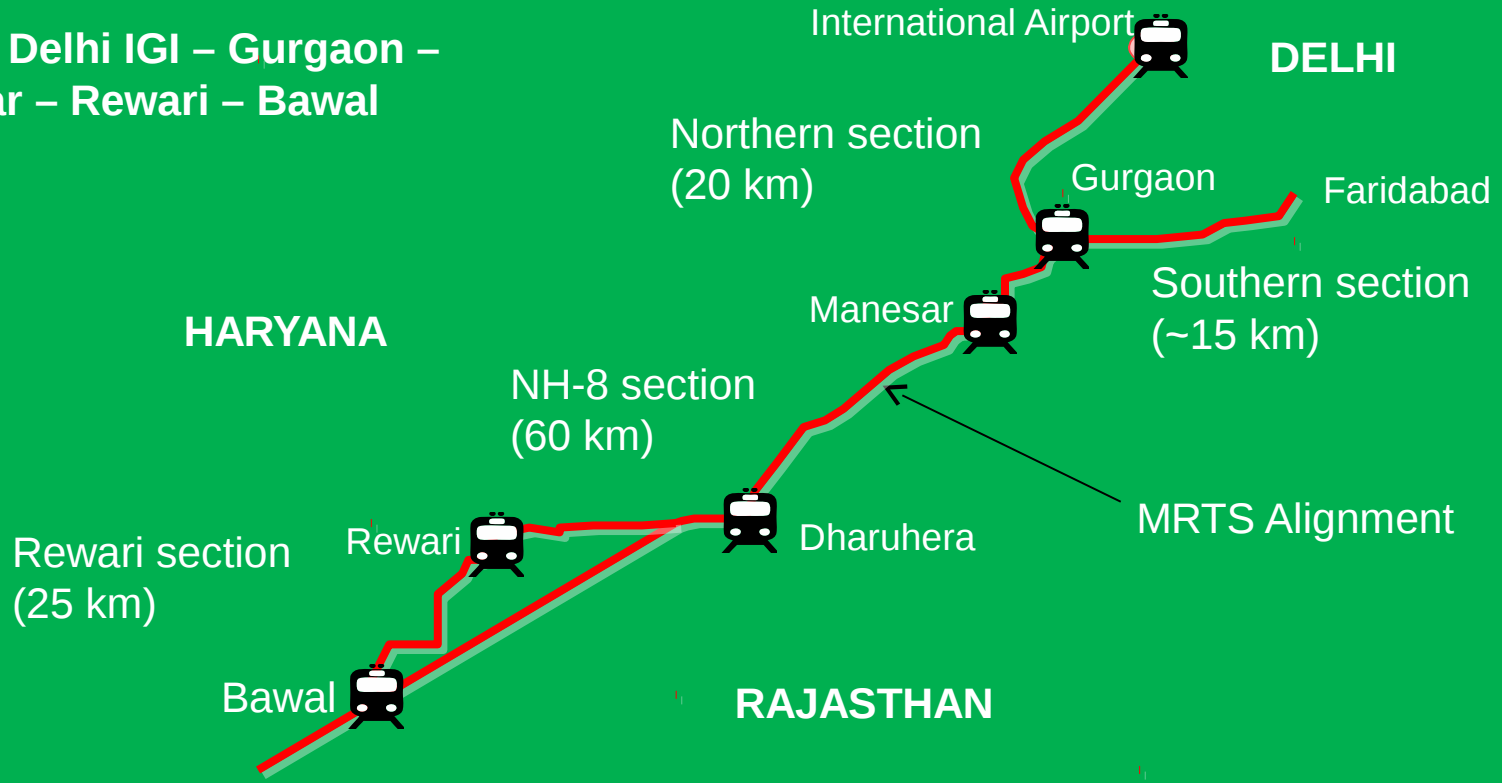
Global City project, Haryana

- Spread over an area of **1100** acres close to Gurgaon
- Has the potential to generate **25%** more GDP than that of Gurgaon
- Will generate over to **200000** jobs

Festive & Leisure (ECC) + **High value Innovation & Knowledge Industries** + **Central Business Distric** + **Township** = **Global City Haryana**

MRTS: Delhi IGI – Bawal

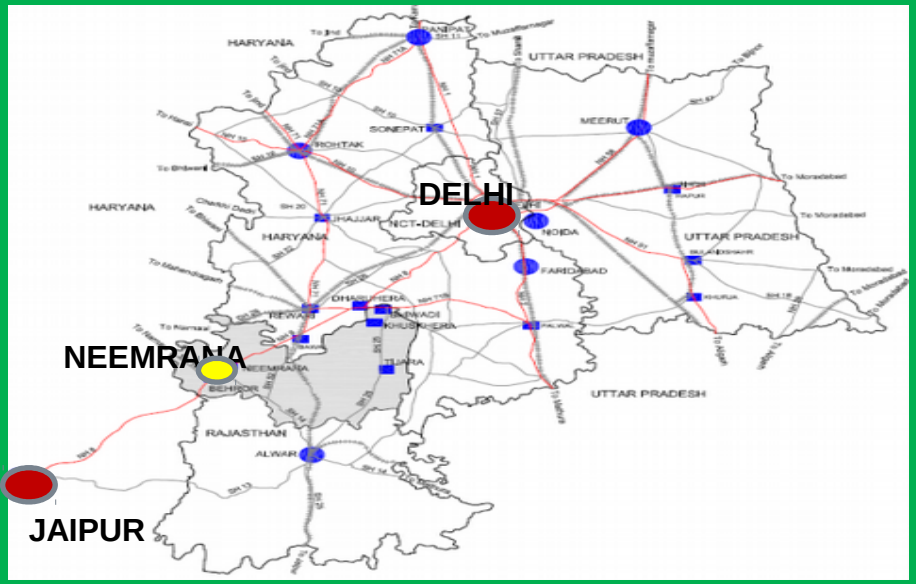
Route : Delhi IGI – Gurgaon – Manesar – Rewari – Bawal



Total route length ~**120** **km**

Can be extended upto Neemrana Node in Rajasthan

Khushkhera-Bhiwadi-Neemrana IR



Early Bird Projects:

- Aerotropolis
- Knowledge city
- Neemrana - Bhiwadi Road link (50 km)

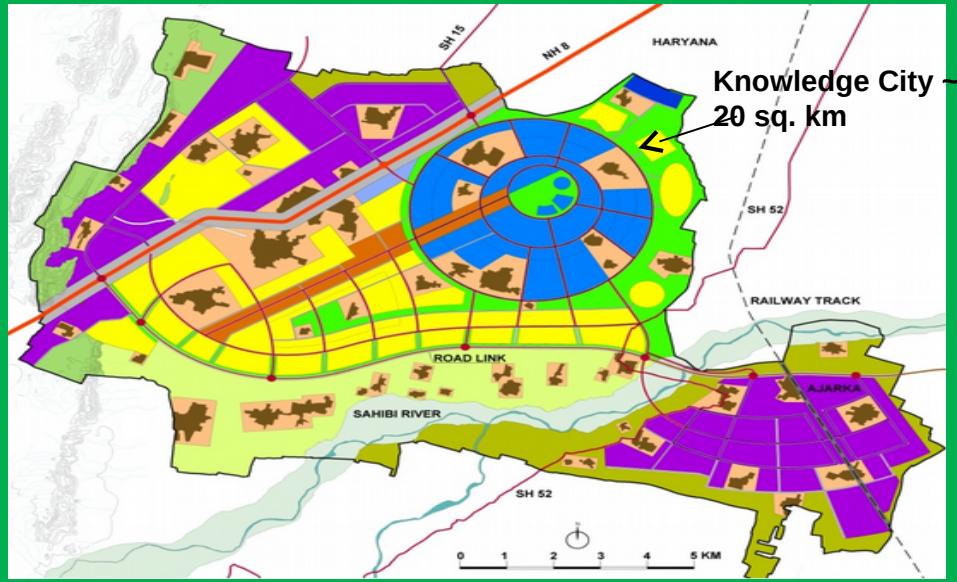
Concept Master Plan for KBN Investment Region

Area: **165 sq. km**
Urbanisable Area – **101 sq. km**

Target Population: **1.3 million**

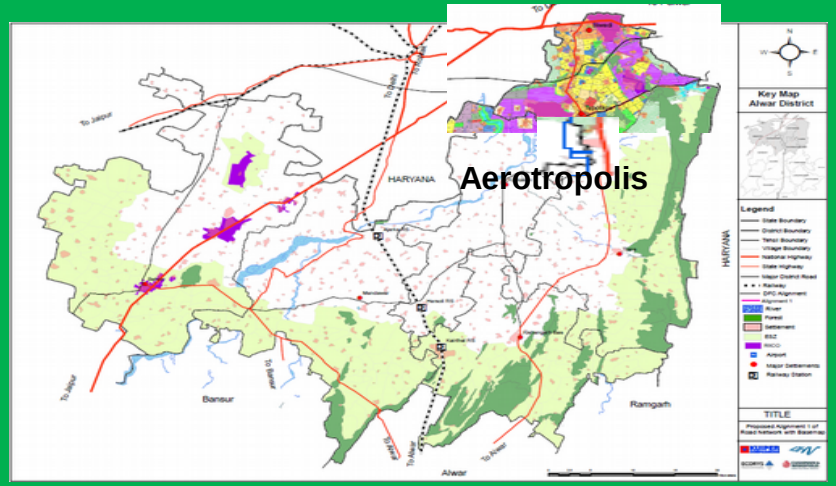
Projected Employment – **0.55 mn**

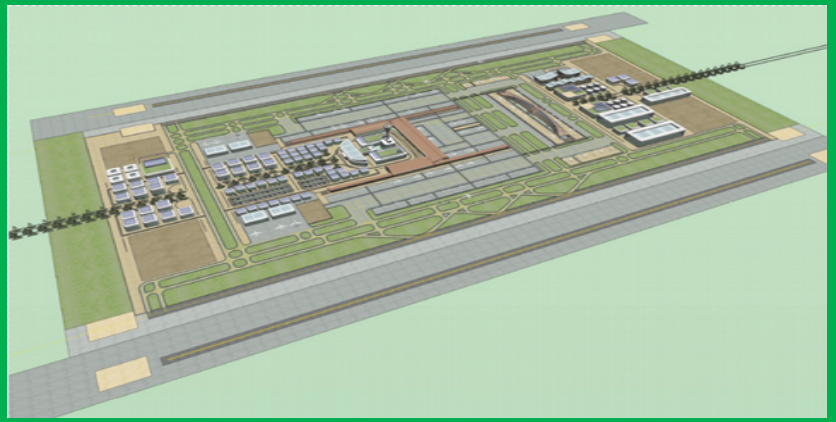
Investment Region target industries - Electronic, Automotive, Pharmaceuticals, Bio- tech and ICT



Aerotropolis

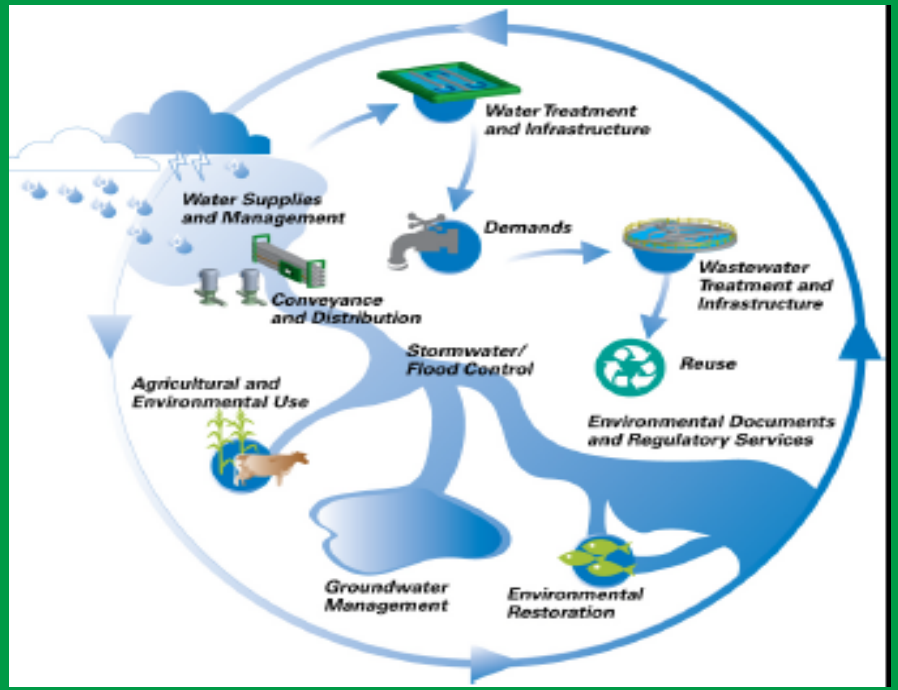
- • **Strategically located between Delhi and Jaipur , south of Bhiwadi Master Plan Area**
- • **Total Area: 24 sq. km**
- • **Total Cost: Rs. 4000 crores**
- • **Components:**
  - • Passenger & Cargo traffic handling
  - • Non aviation - Business Parks, Hotels, Distribution centers etc.
  - • Maintenance Repair Overhaul (MRO)



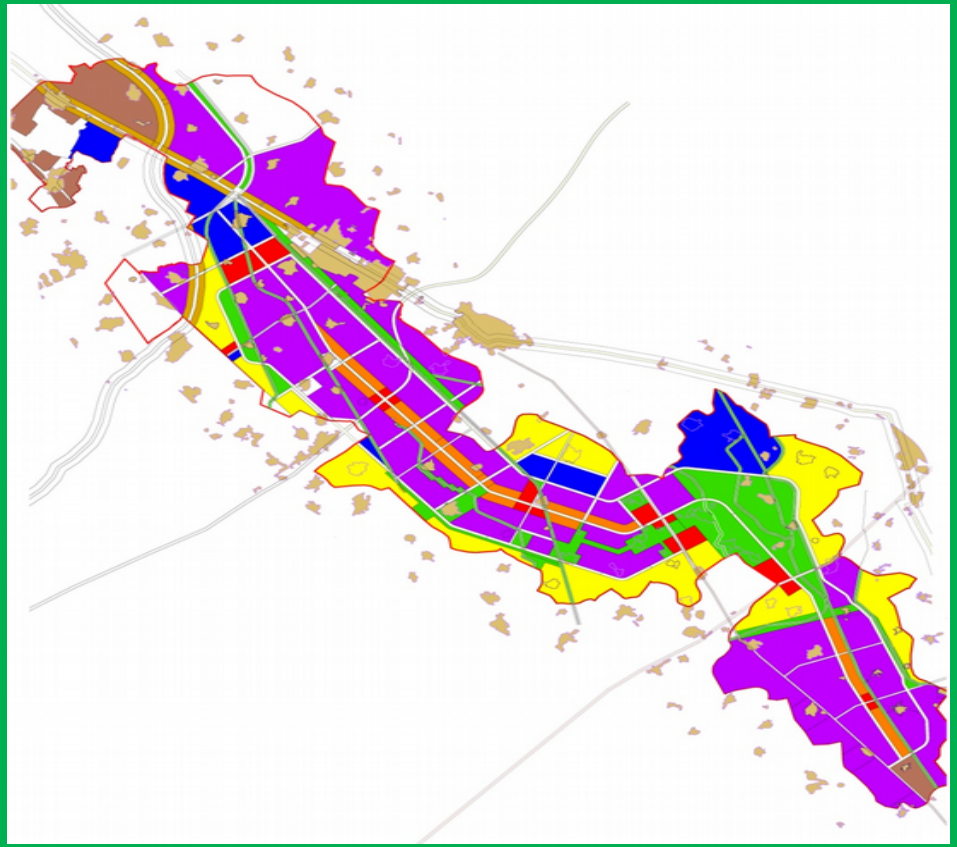


Integrated Water Resource Management Plan

- Consider all sources of water
- Accounts for all end users of water
- Consider water quantity and quality
- Stakeholders participation in the planning process
- IWRM decisions made at local and river basin levels are in-line with broader national objectives
- Sustainability in long range water resources planning
- IWRM strategies aimed at integrating social, economical and environmental goals



Dadri Noida Ghaziabad Investment Region – Master Plan

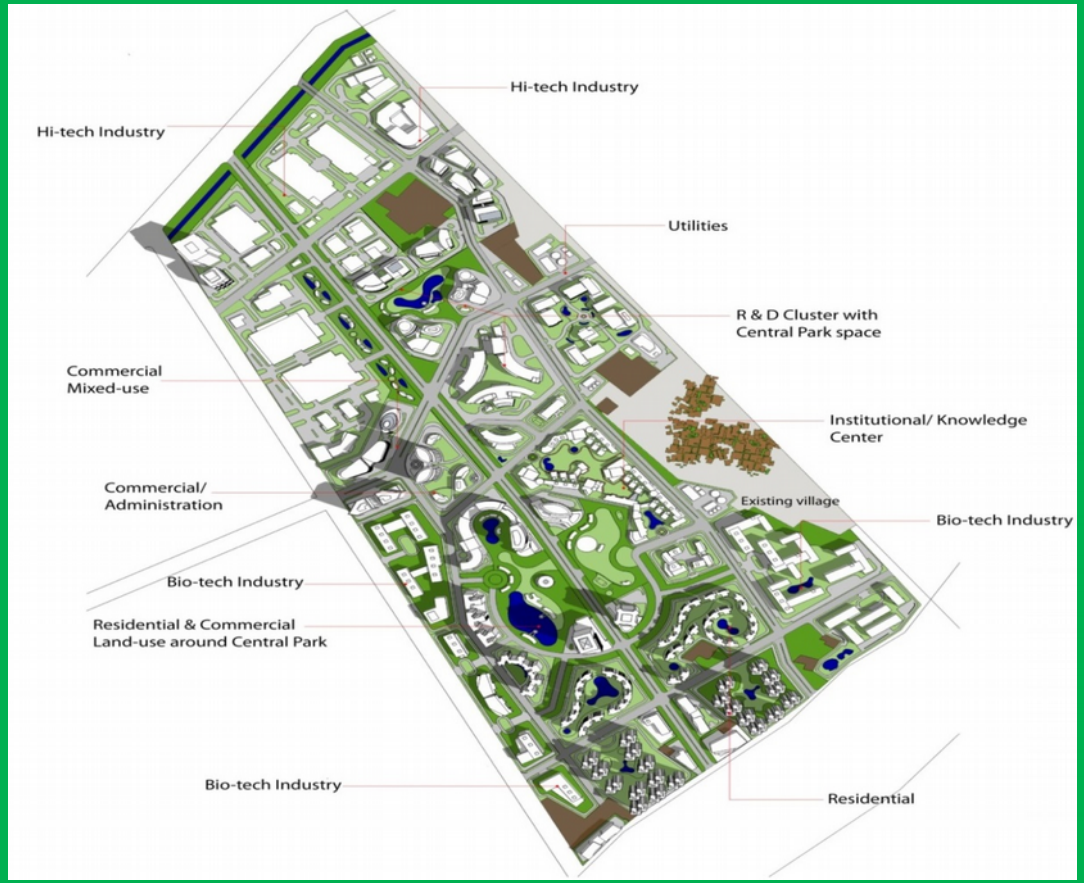


Total Area: Approx 210 sq kms

Land Use	%
Industrial Area	37
Residential	14
Commercial	4
Public - Semi Public Facilities	6
Utilities	1
Transportation	14
Green Areas / Agriculture	17
Non Developable area	7
Total	**100**

Integrated Industrial Township-Project Components

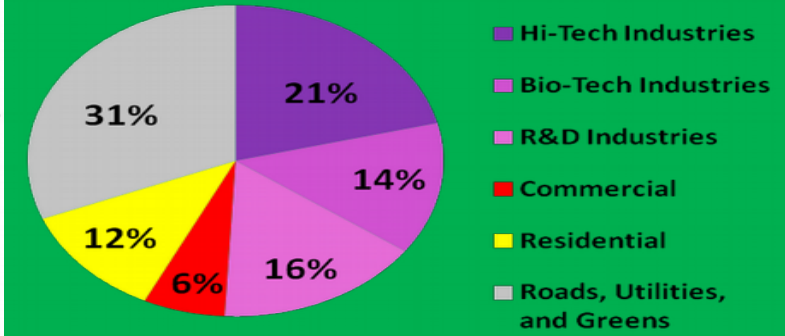
Promoting Knowledge – based Hi-tech Industries



New age industry sectors

R&D Services
Auto, Electronics, ICT
Hi-tech Industries
Fabrication (semiconductors) industries, Nanotechnology, Optoelectronics

Bio-technology
Bio-Pharma, Bio-Services (clinical research), Bio-Agri, Bio-Industrial, Bio Informatics



51% Industrial Land Use
Total Built-up- **6 Million sq. m**
Total Employment- **58,000**

Housing is an integral enabler of DMIC's vision of sustainable industrial development; we have taken some steps to conceptualize and plan towards fulfillment of this vision

Objective of DMIC for housing

- **Housing** is an **integral enabler of the DMIC vision** to **boost industrial activity,** and **build 24 cities** with **world-class infrastructure by 2040**
- **Vision of "slum-free housing development"** with **inclusive, equitable and sustainable housing townships**, in which every citizen has **access to basic civic infrastructure, social amenities and quality shelter**

Initiatives underway by DMICDC

PERMANENT HOUSING

1

- Formulate an Affordable Housing "policy" for DMIC as a whole; this would leverage learnings from international and domestic housing development models and bear in mind prevalent government policies
- Contextualize this policy for each node of DMIC, focused on its unique characteristics

2

- Develop a "concessions package" for housing; this would be aimed at a "win-win" to all stakeholders involved, including government, funding agencies and private developers

3

- Define housing elements (amenities, O&M-related aspects etc.), which will ensure that quality standards are adhered to, also enable the creation of an optimal eco-system

TEMPORARY HOUSING

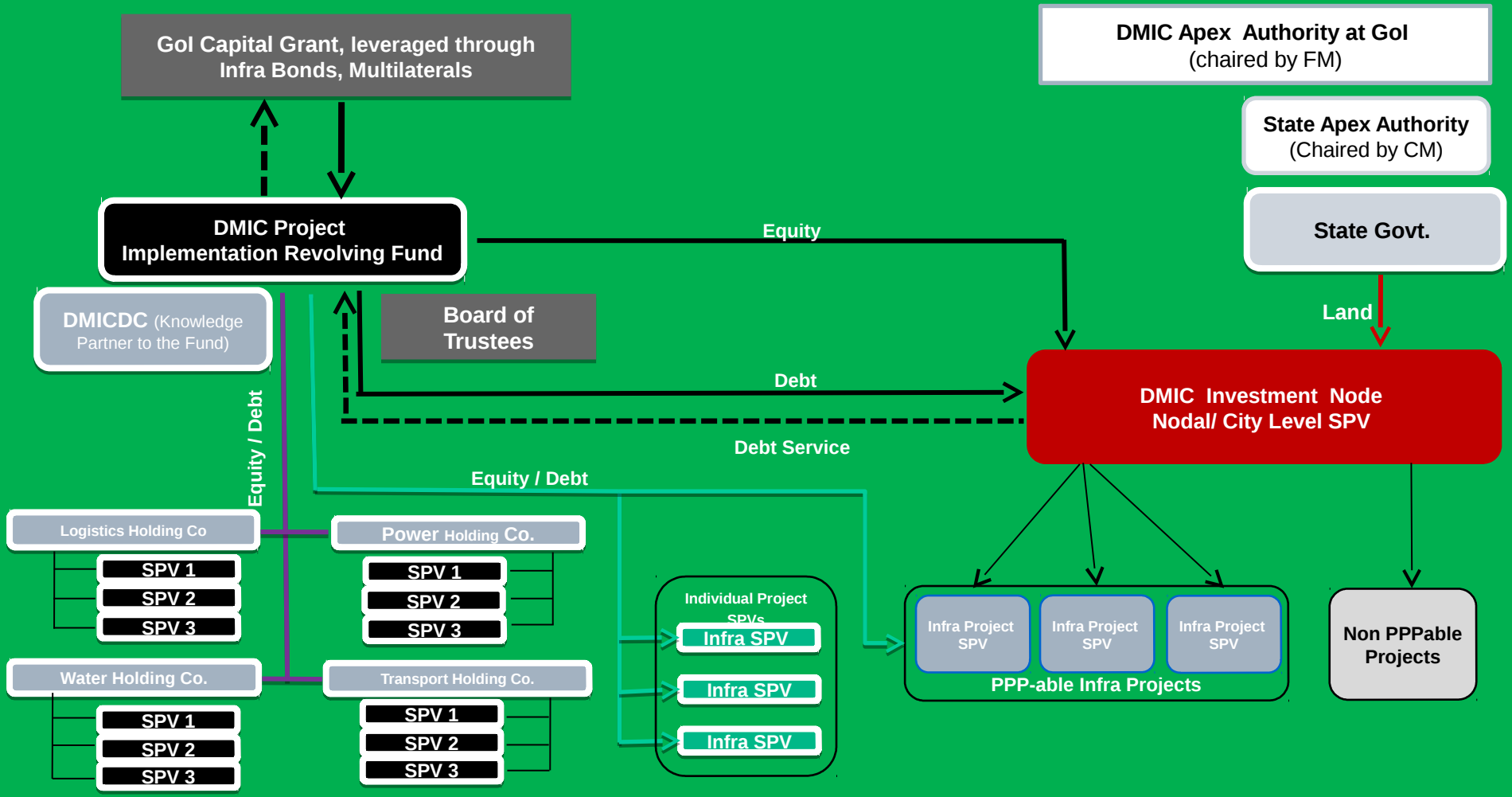
4

- Develop construction guidelines with appropriate quality parameters set out, to be included as part of the bid package of the anchor tenant/ sub-contractor

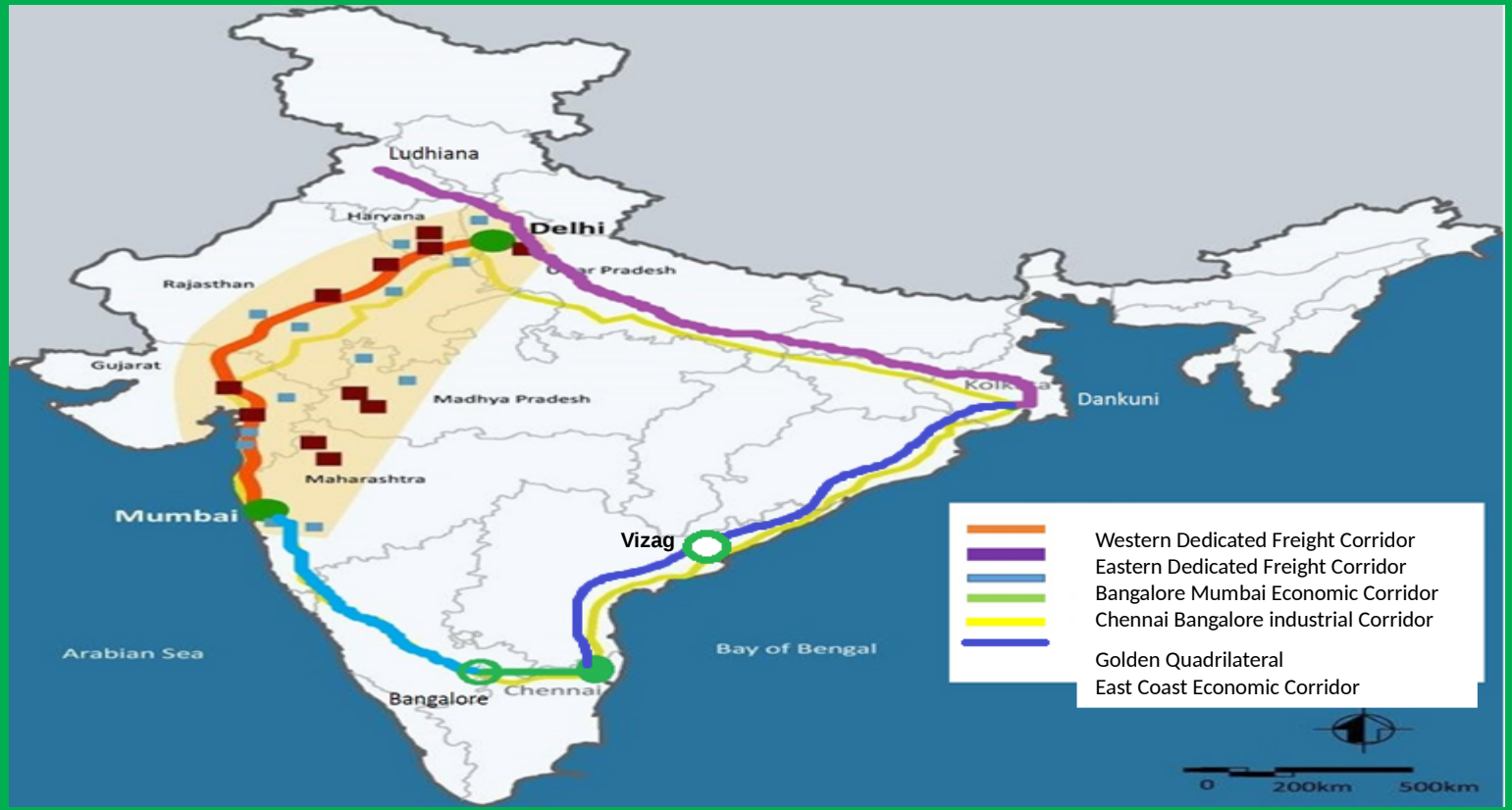
Technology (Skill Gap) Matrix

Investment Region Technical Areas	Manesar-Bawal IR	Pithampur-Dhar-Mhow IR	Dholera Special IR	Dadri-Noida-Ghaziabad IR	Khushkhea-Bhiwadi-Neemrana IR	Igatpuri-Nashik-Sinnar IR
Industrial automation & Process Control	√		√	√	√	
Design and Manufacturing	√	√		√	√	√
Automobile mechatronics	√	√		√		√
Hydraulics & pneumatic control	√		√	√	√	√
Electrical & Mechanical Maint.	√	√	√	√	√	√
Networking & Information Technology	√	√			√	√
Infrastructure and construction technology	√	√	√	√	√	√
Welding and fabrication	√	√	√	√	√	√
Garments- design and construction	√	√	√			
Food processing	√	√	√	√	√	√
Chemical and Pharma		√				
Environmental engineering	√		√			
Testing and Calibration	√	√	√	√	√	√
Soft Skills	√	√	√	√	√	√

Institutional & Financing Structure approved by the Cabinet



Other Industrial Corridors being planned in India



These corridors will transform India as a manufacturing hub in next one decade.

Thank you