



WRI INDIA



Geospatial data for meeting the SDGs

GeoSmart India 2019

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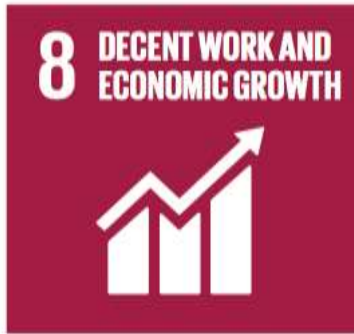


INDIA'S RESOURCE CONSTRAINTS

18% of the world's population

But only 2.5% of the world's land mass
and 4% of the world's fresh water

**It is crucial that we use our
limited resources optimally**



Needs spatially distributed actions

There is a need to look at a spatial distribution of demand and supply

Merely having adequate supply to meet demand, in aggregate, is not enough – we need to understand the spatial distribution of demand and supply

This calls for Smart mapping of data and its visualization

There are strong linkages between sectors

But available data sets are fragmented

Thus a need for Smart layering of the data across diverse sectors

Examples of big mistakes we are making

- Water intensive crops grown in areas with low water availability – sugar cane in Maharashtra and paddy in Punjab
- Natural water channels not respected as cities grow and need more built up space – floods in Chennai
- Locating thermal power plants in areas with water scarcity



How can spatially mapped data help us

- Identify deficient / problem areas requiring attention
- Diagnose nature of the problem
- Determine remedial measures to fix the problem effectively
- Facilitate performance monitoring with a geographical focus
- Better locate facilities – schools/ health centers, etc.
- Deploy resources optimally
- **There are many more examples**



Corporates also need GeoSmart planning

- To identify markets
- To plan supply chains
- Do develop production plans
- To map customers and their consumption patterns
- To develop service plans
- To develop investment plans

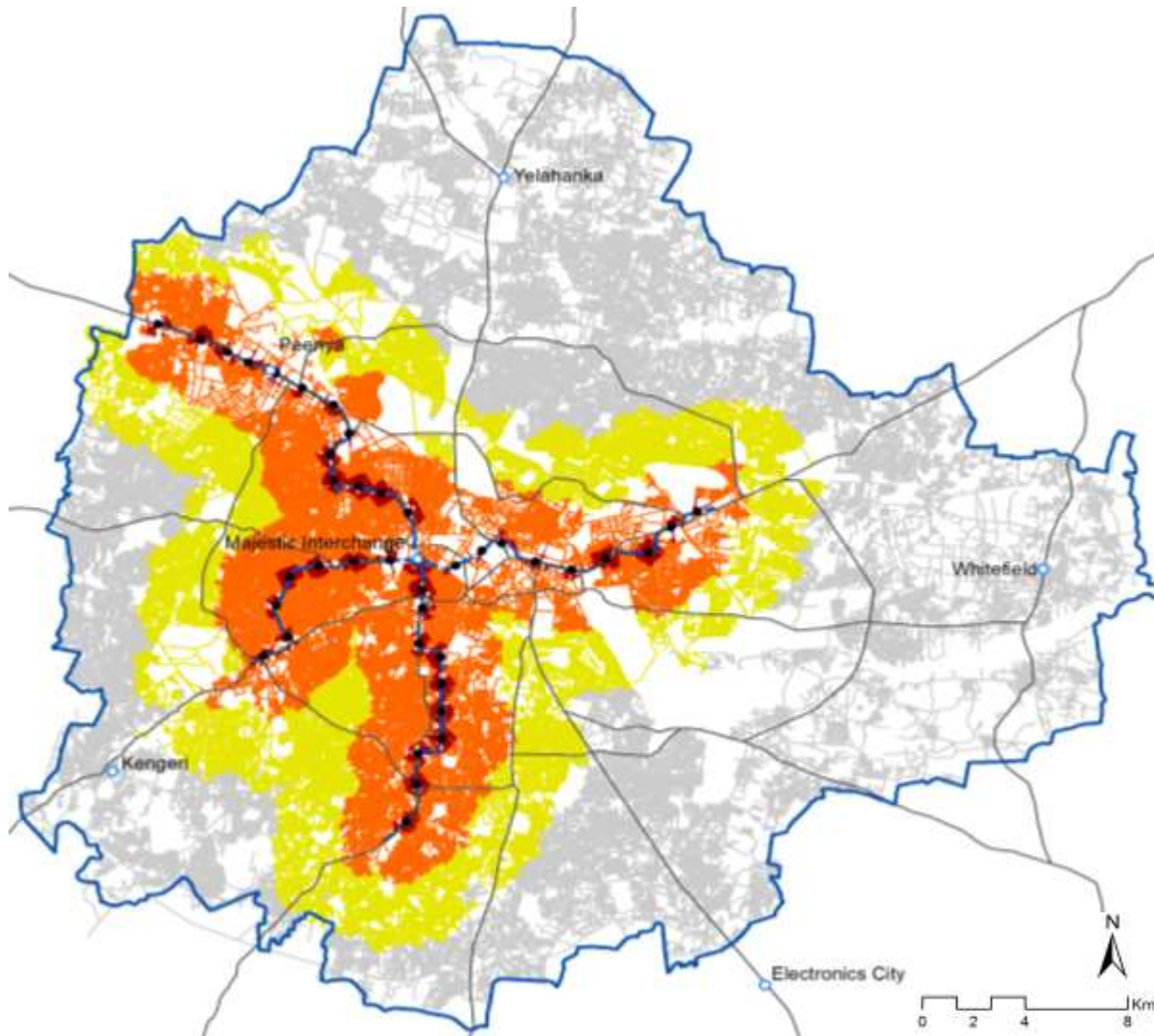


Bangalore Metro: Captive population

0.7 million people live within 0.5 kms
(8% of 2011 Population)

3.7 million people live within 2.5
kms (45% of 2011 Population)

6.1 million people live within 5
kms (73% of 2011 City Population)

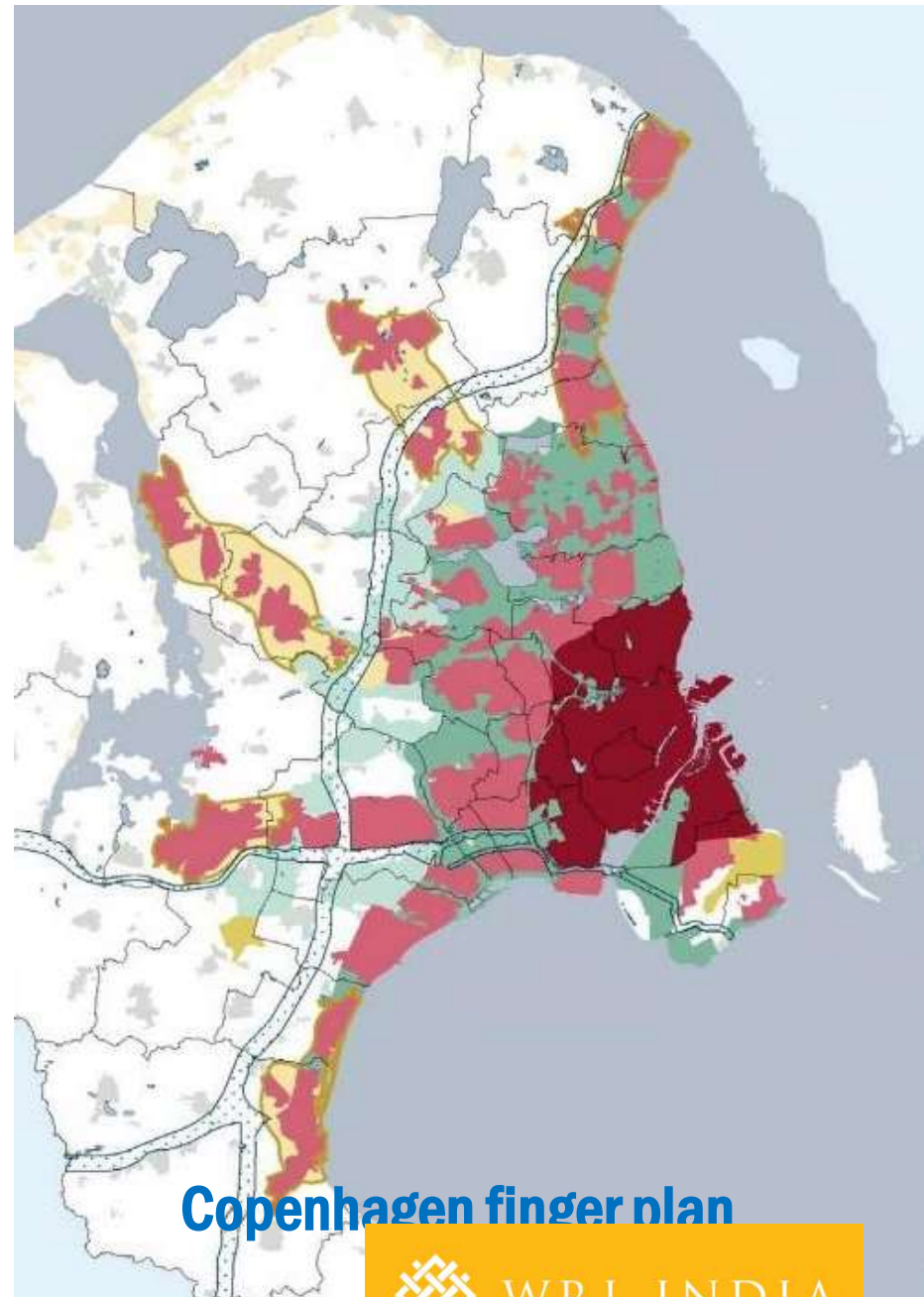


Legend

- Phase I Stations
- Bengaluru Corporation
- Major Roads
- Phase I metro line
- 500 m from stations
- 2500 m from stations
- 5000 m from stations
- Outside 5000m from stations



Singapore concept plan 2011



Copenhagen finger plan

Some of WRI's data platforms

- **Resource Watch** – A free and open data platform developed by WRI and 30 partners with more than 200 available data sets - topics ranging from climate change to human migration, deforestation to air quality, agriculture to energy – resourcewatch.org
- **Global Forest Watch** - A data platform to analyse global forest trends - globalforestwatch.org
- **Aqueduct** – a water data platform with tools that allow linking water availability to floods, agriculture, etc. – wri.org/aqueduct
- **Power Explorer** - Open data platform on power plants – powerexplorer.org



Challenges

- Highly fragmented data
- Weak data collection and management systems
- Reluctance to share data
- Inability to recognize the power of spatially mapped data, in visual form
- Inertia and comfort with the current way of doing things
- Data science is still a mystery to many – not understood



Getting around these challenges

Need for a much wider understanding of its potential outside the GeoSmart community – in the user community

Develop a systematic process for collecting and managing data across sectors and in user friendly ways

It needs to be de-mystified

Thank you