Defining thresholds to

Achieve Decent Standards of Living

VASUDHA FOUNDATION

Green ways for a good earth!

SETTING THE CONTEXT OF IDENTIFYING DEVELOPMENT DEFICIT IN INDIA

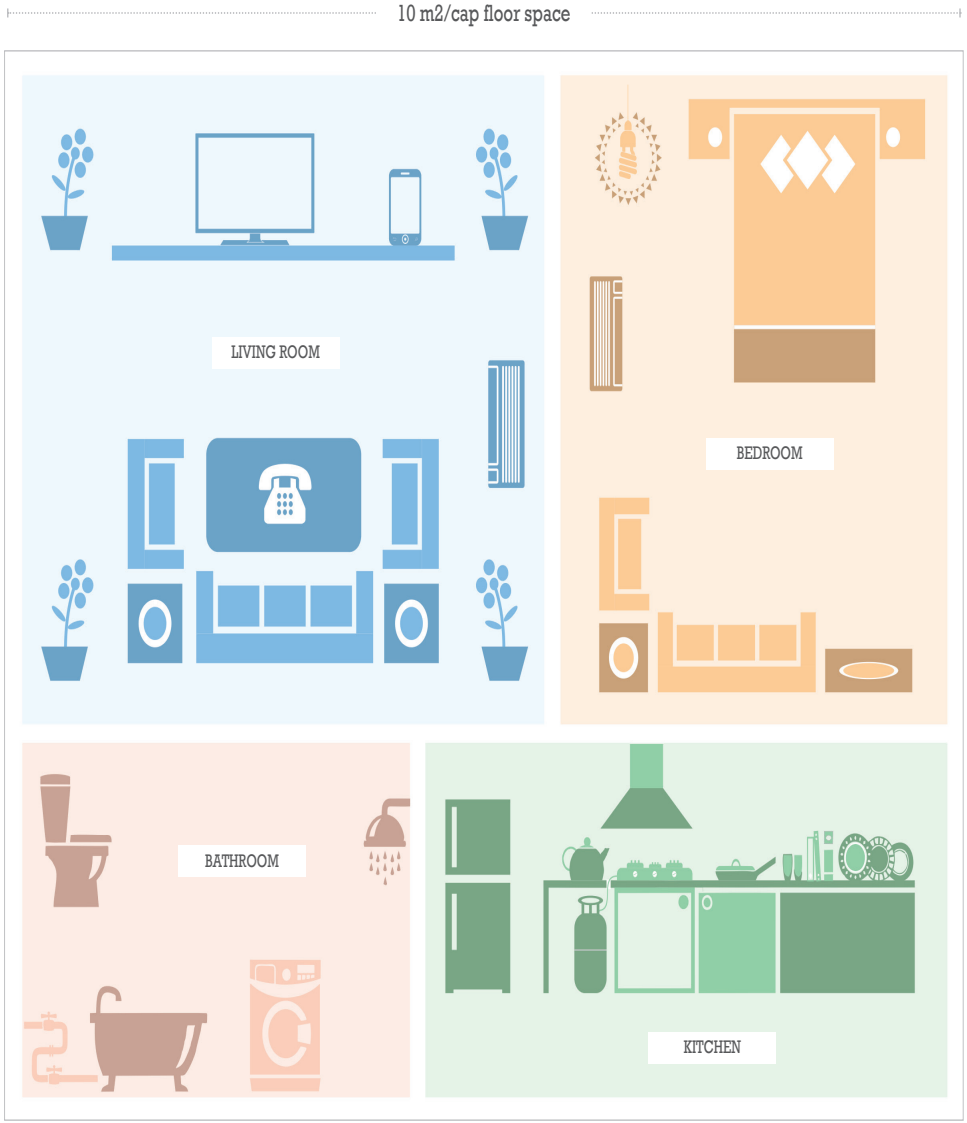
IDENTIFYING OPPORTUNITIES FOR INDIA TO OPT FOR SUSTAINABLE AND LOW CARBON DEVELOPMENT OPTIONS

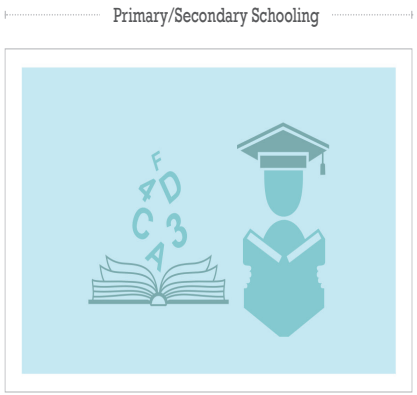
Overview of the Project: Identifying Development Deficit for India

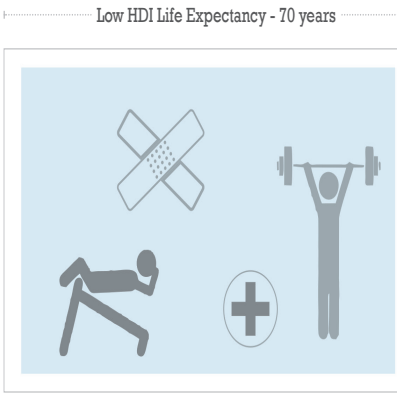
- Primarily, this entails, determining:
  - What decent standard of living for India would look cutting across key demand side sectors, while identifying the gaps between the current levels of development and thresholds for decent standard of living;
  - Arriving at supply side requirements to meet the decent standard of living thresholds and also exploring package of options available for India to meet the development thresholds and sustainable emission pathways
  - Finally, draw on the linkages between development indicators and emission pathways to not only influence the way climate change is discussed within India and Globally

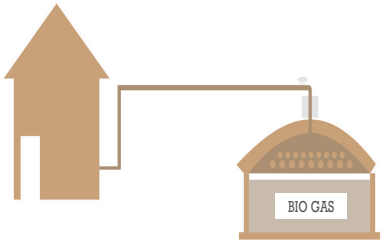
The First Phase: What is Decent Standard of Living (DSL)

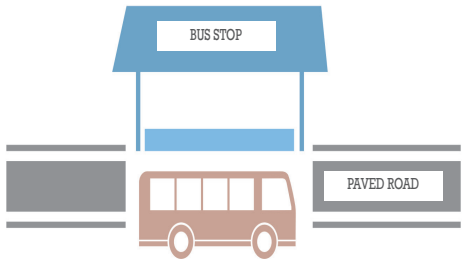
Our Vision

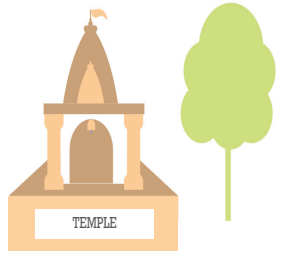












Our Methodology

Stepping Back from Our Vision of DSL,

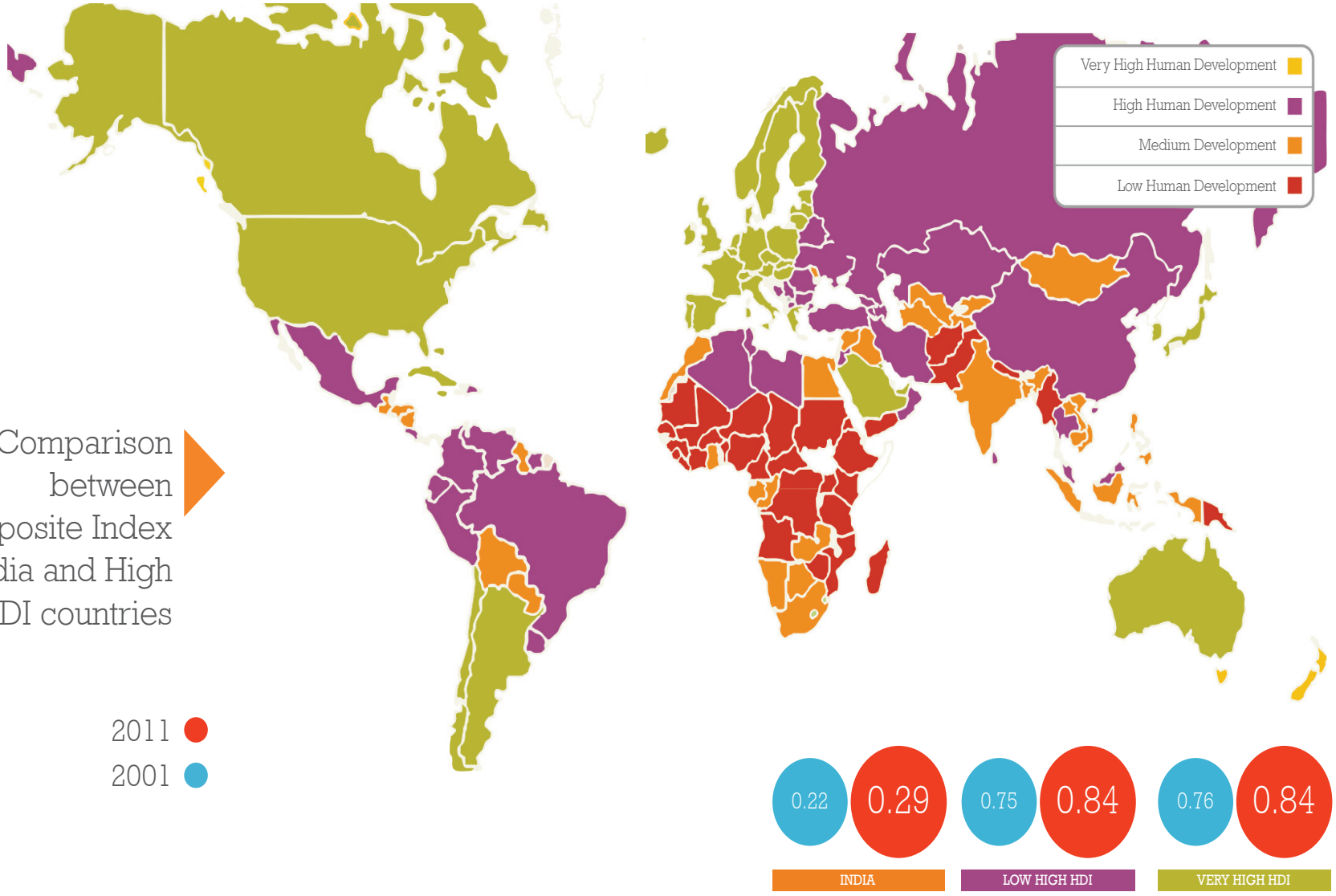
- we zeroed down on 8 broad issue areas, namely, Health, Education, Food and Nutrition, personal housing attributes, household assets, mobility infrastructure, water and sanitation and access to energy
- We looked at all possible indicators for each of the issue areas, for which data was available for India as a whole as well as all the states for two different points of time
- We zeroed down on 33 indicators cutting across the various sectors, after a robust analysis which looked at inter-linkages and cross-linkages between indicators, data availability, elimination possibility of double counting…..
- To further identify the most representative indicator/s for each issue areas, we used a statistical modeling tool, The Principal Component Analysis.
- With a combination of what the PCA threw up and on the basis of our own vision of DSL, we finalised on 16 most representative indicators

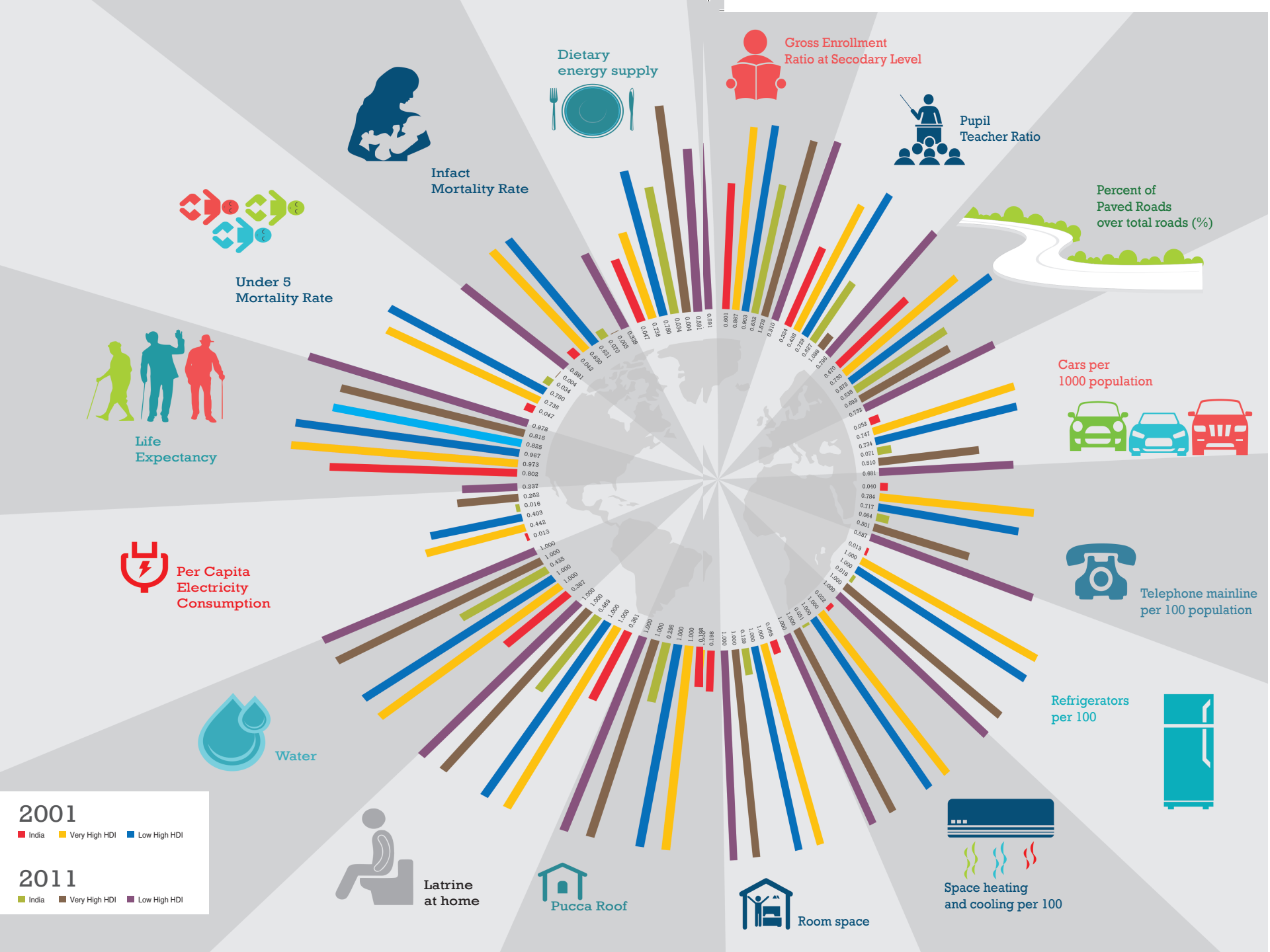
Issue	indicators
Food and nutrition	Dietary energy supply (kcal/caput/day).
Health	Infant mortality rate (number per 1000 live birth)
	Under 5 mortality rate (number per 1000 live birth)
	Life expectancy
Education	Pupil teacher ratio (from class 1 to 10).
	Gross Enrolment Ratio at Secondary Level
Personal Housing attributes	Pucca roof (permanent roof made of concrete or other such construction material)
	Percentage of households with living space 10 sqmts per person assuming an average household size of 4 persons
Household Assets	Motor car (% of households) for data from Indian sources. Unit used for international comparison and composite index was per 1000 population
	Telephony- Fixed line (% of households)
	Refrigerators per 1000 households
	Air conditioners/ desert coolers per 1000 households
Infrastructure	Paved or surfaced roads as a % of total roads
Water and Sanitation	Latrine Facility at Home (% of households)
	Tap water supply at home (% of households)
Energy Access	Per Capita Electricity Consumption (Kwh/yr/person)

Methodology Contd..

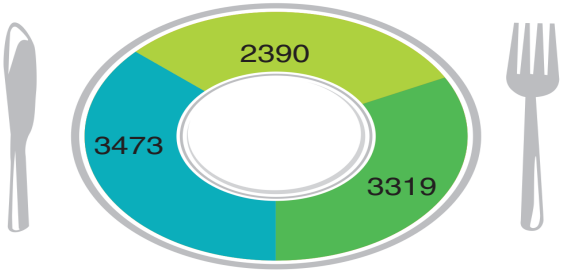
- To arrive at thresholds for decent standard of living and to assess the gaps in India's development vis-à-vis, the decent standard of living, our approach was:
  - Create a composite index based on the data available for each of the indicators from 29 states, for two different points of time
  - We developed a similar composite index for data available for each of the indicators from High HDI Countries.
  - Composite index was developed for two categories of high HDI Countries. One category was a HDI Score of 0.8 and above and the second category of a HDI Score of above 0.85.
  - The thresholds for decent standard of living, was primarily to achieve the development levels of at least the HDI Countries which have a score of 0.8.

Where does India Stand?

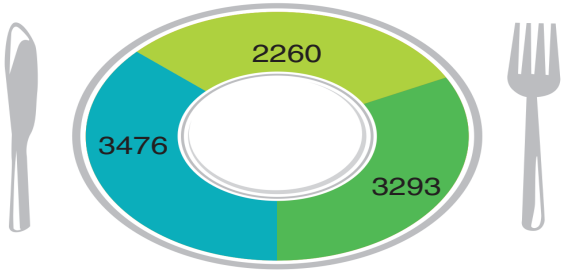



Dietary energy supply
Gross Enrollment Ratio at Secodary Level
Pupil Teacher Ratio
Infact Mortality Rate
Percent of Paved Roads over total roads (%)
Under 5 Mortality Rate
Cars per 1000 population
Life Expectancy
Per Capita Electricity Consumption
Telephone mainline per 100 population
Refrigerators per 100
Water
Latrine at home
Pucca Roof
Room space
Space heating and cooling per 100
2001
India
Very High HDI
Low High HDI
2011
India
Very High HDI
Low High HDI

Comparison between Dietary Energy Supply of India and High HDI Country (Kcal/day)



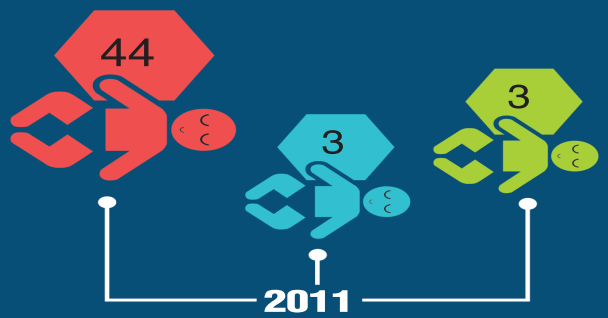
2011

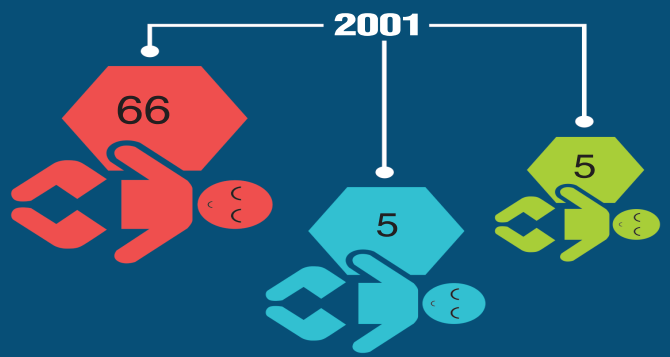


2001

India Very High HDI Low High HDI

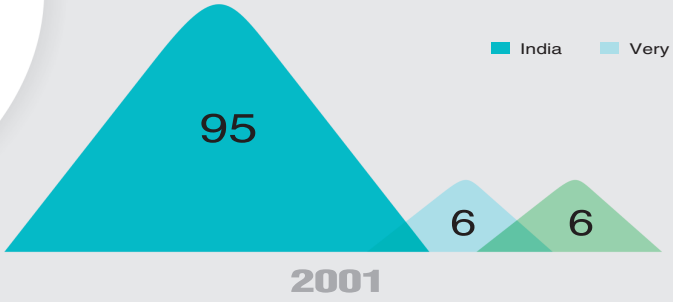
Comparison between Infant Mortality Rate of India and High HDI Country (Per 1000 Live Birth)



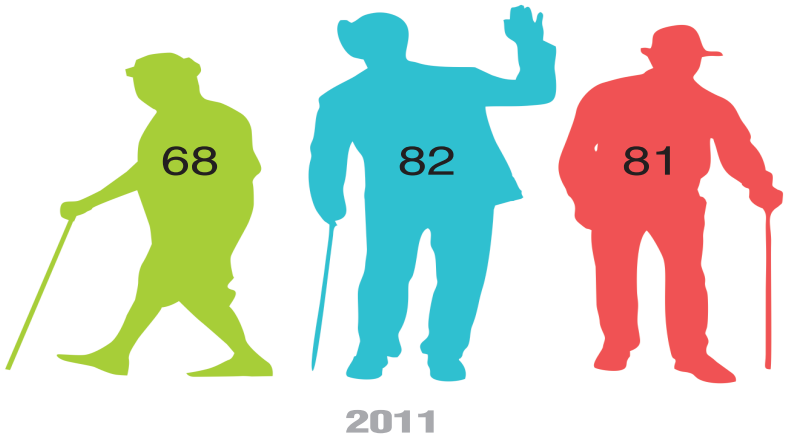


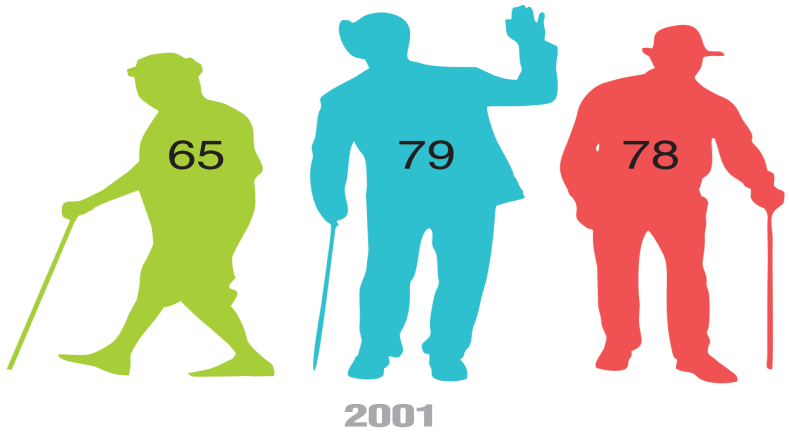
India Very High HDI Low High HDI

Comparison between Under-5 Mortality Rate of India and High HDI Country (Per 1000 Live Birth)



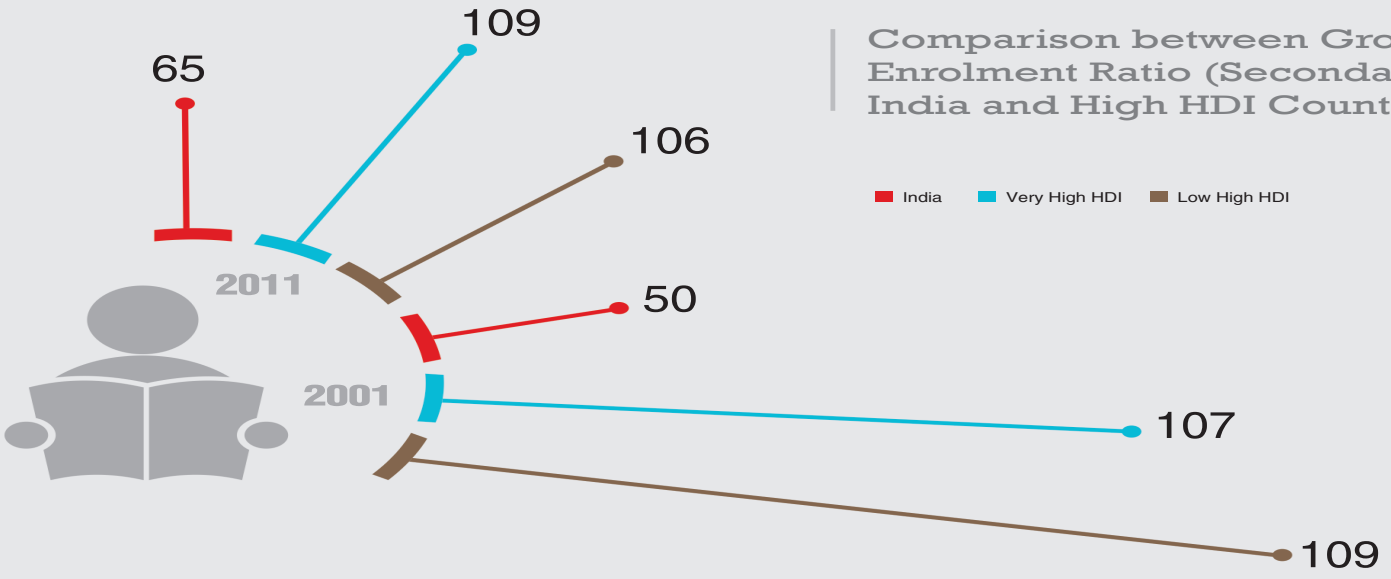
Comparison between Life Expectancy of India and High HDI Country (Years)



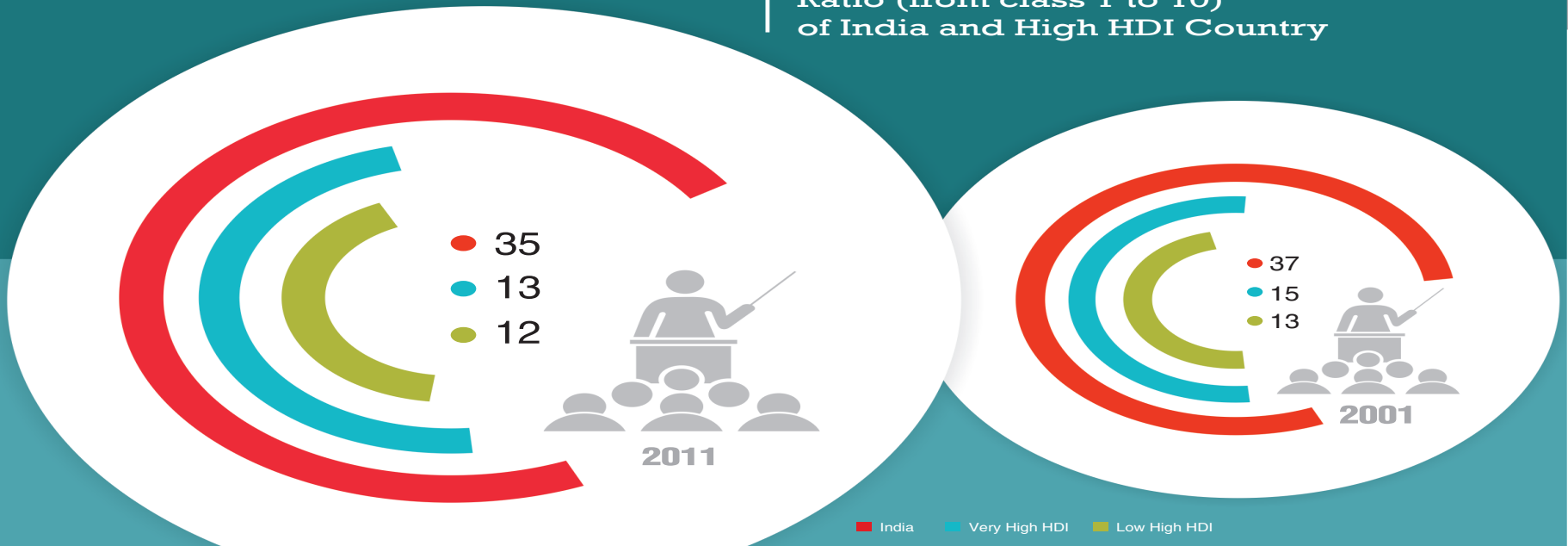


India Very High HDI Low High HDI

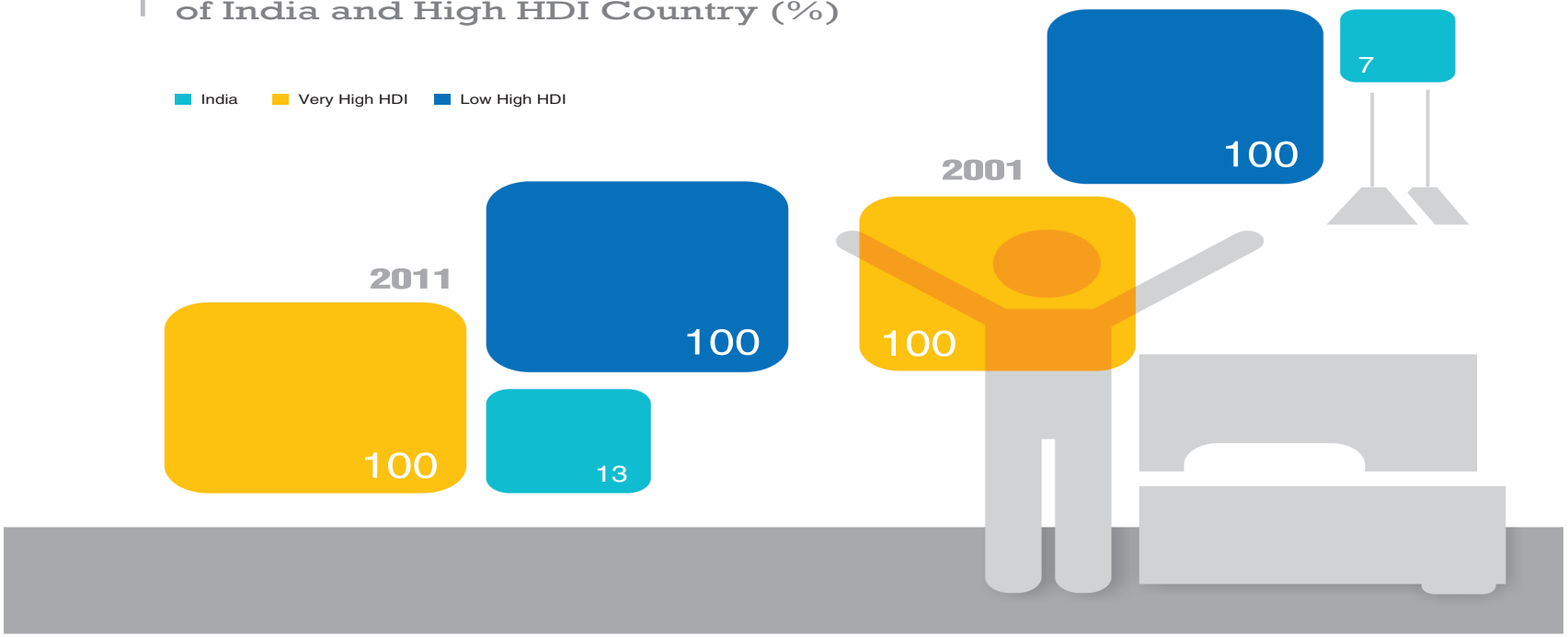
Comparison between Gross Enrolment Ratio (Secondary Level) of India and High HDI Country (%)



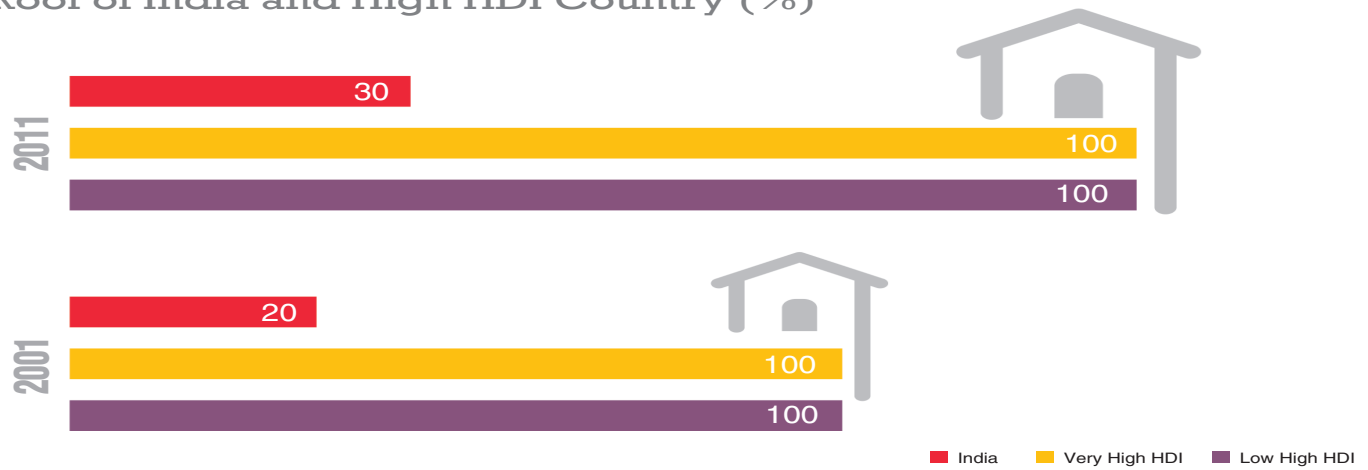
Comparison between Pupil Teacher Ratio (from class 1 to 10) of India and High HDI Country



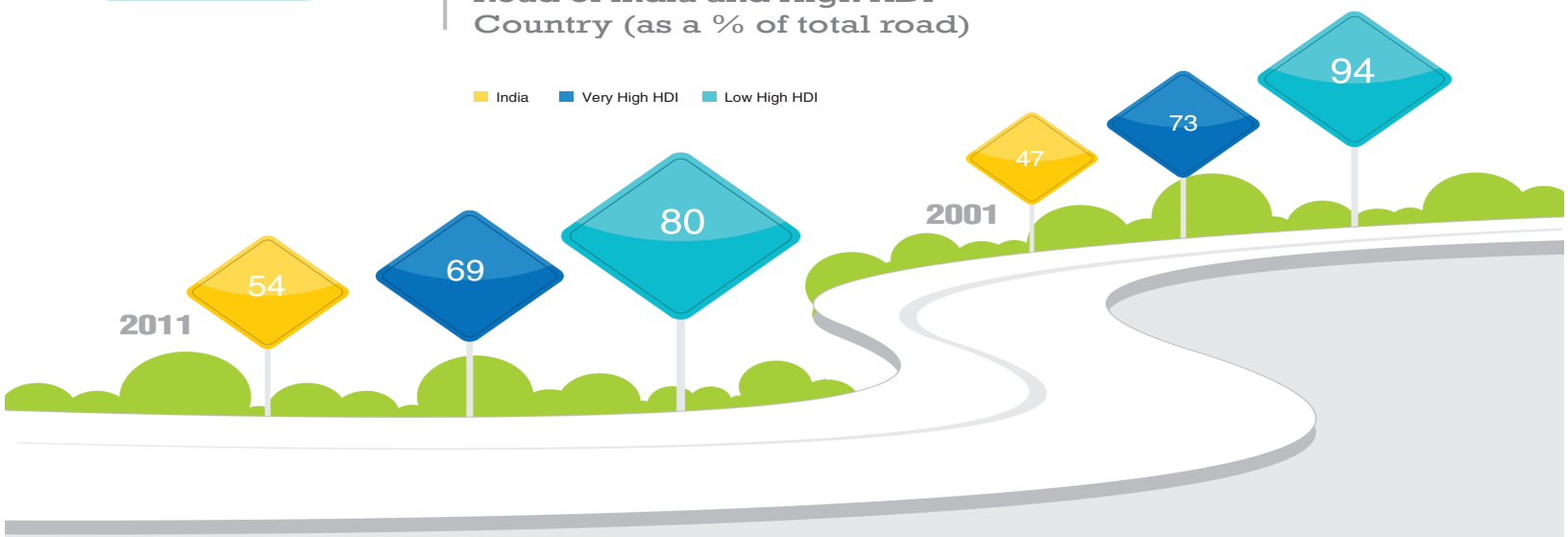
Comparison between Room Space (living space of 10 sq meters/ person) of India and High HDI Country (%)



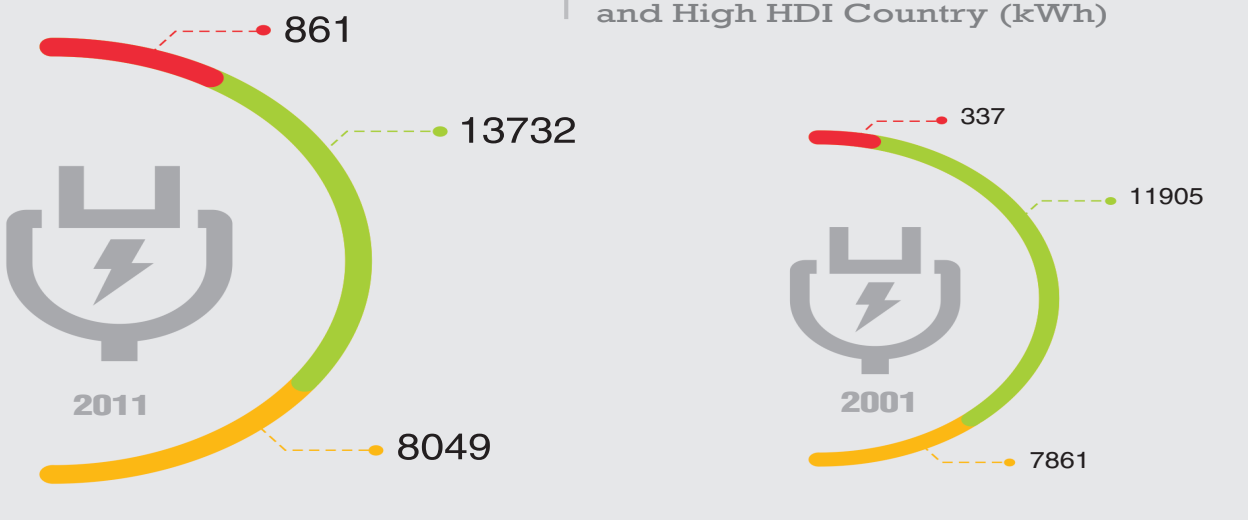
Comparison between Pucca / Concrete Roof of India and High HDI Country (%)



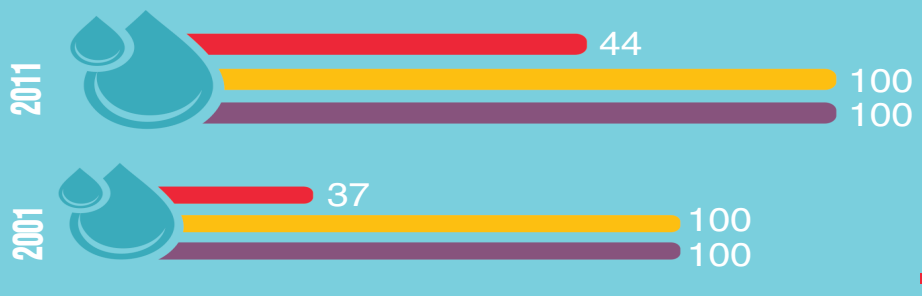
Comparison between Paved Road of India and High HDI Country (as a % of total road)



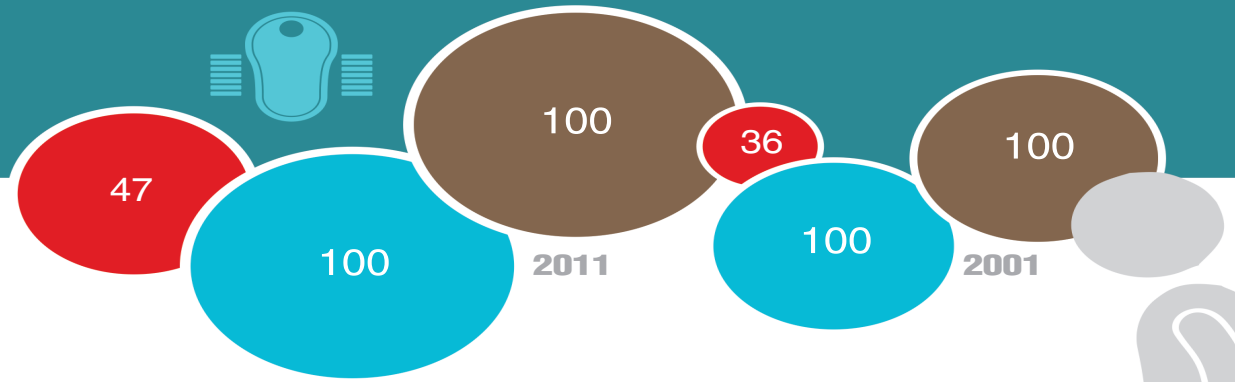
Comparison between per capita Electricity Consumption of India and High HDI Country (kWh)



Comparison between Tap Water Availability (Supply at Home) of India and High HDI Country (%)

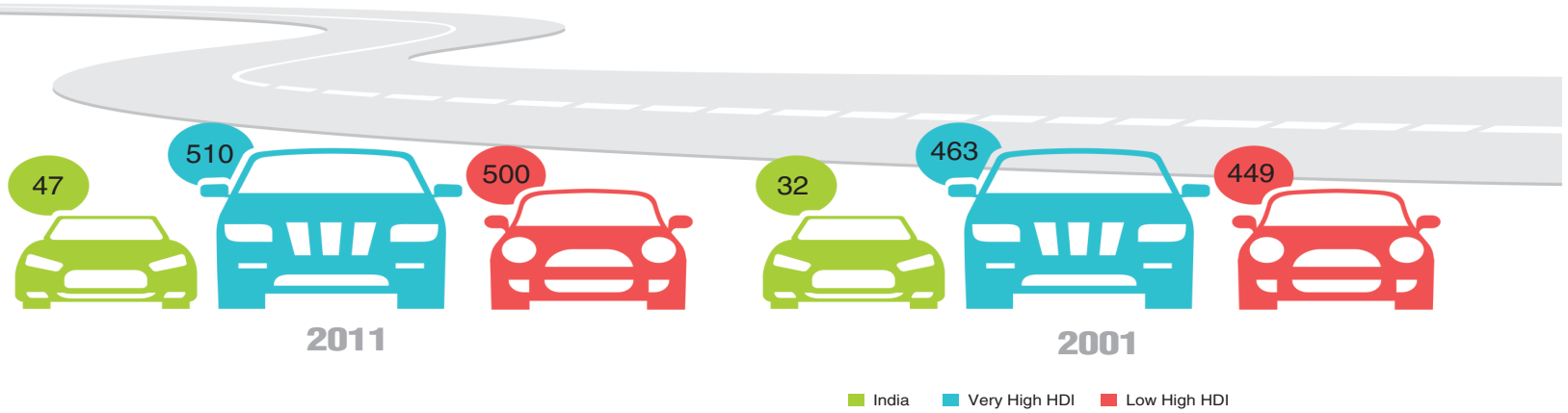


Comparison between Latrine Facility at homes of India and High HDI Country (%)

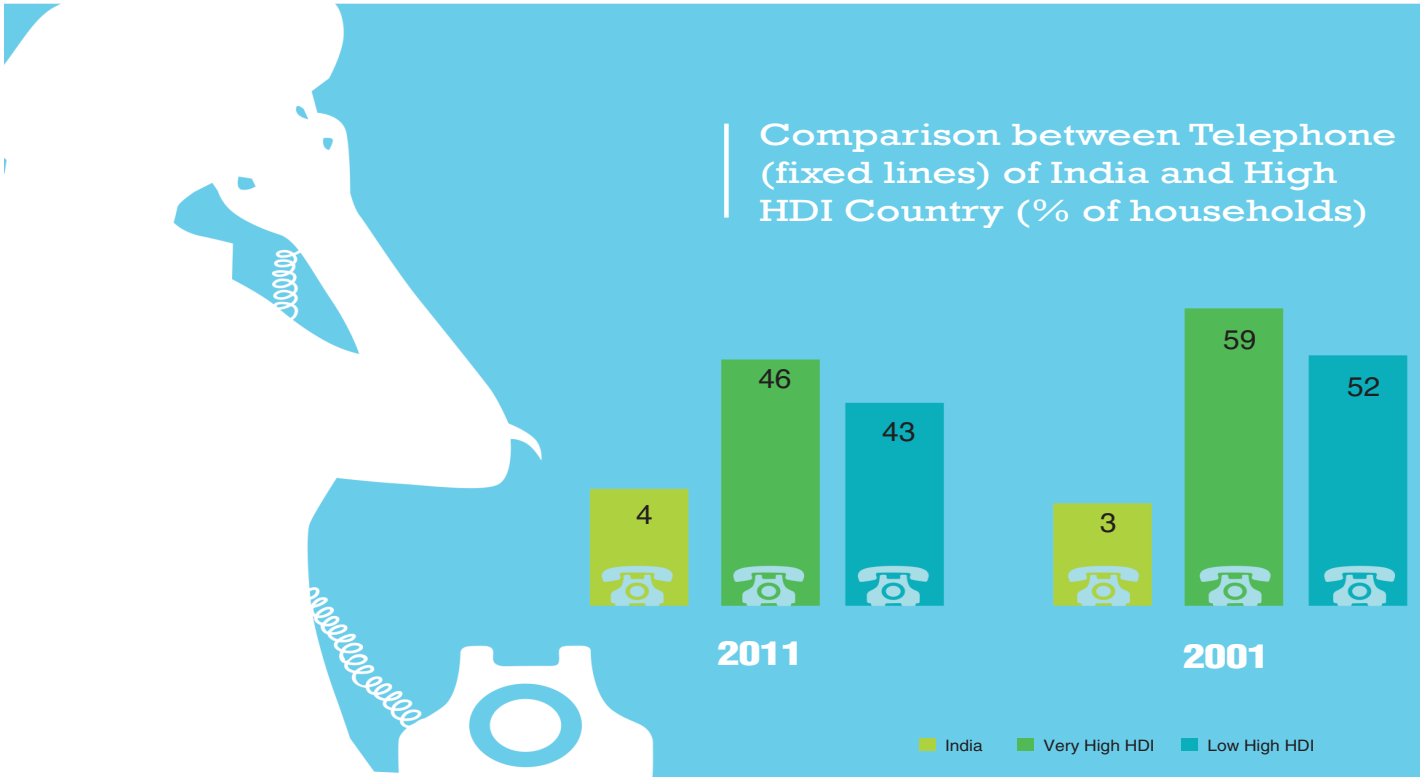


India Very High HDI Low High HDI

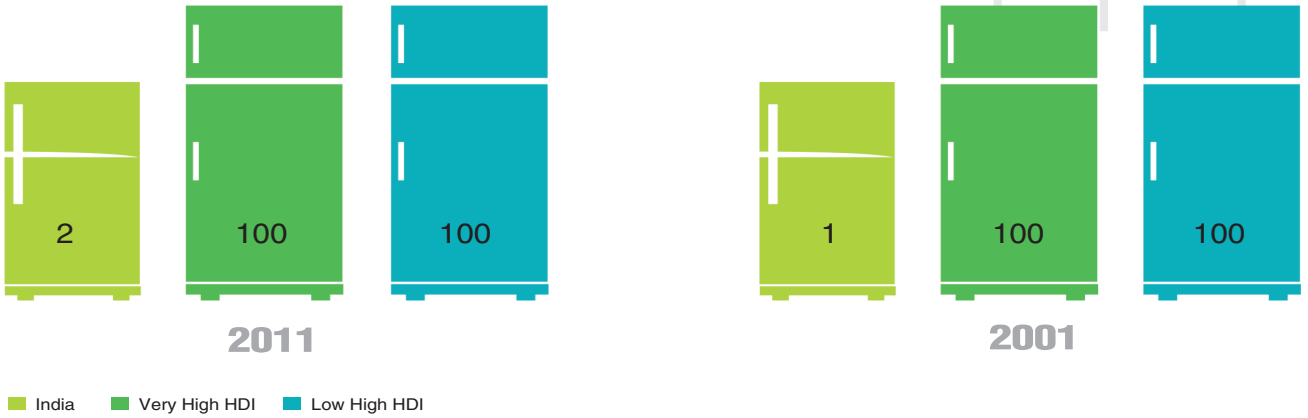
Comparison between Motor Car of India and High HDI Country (Per 1000 population)



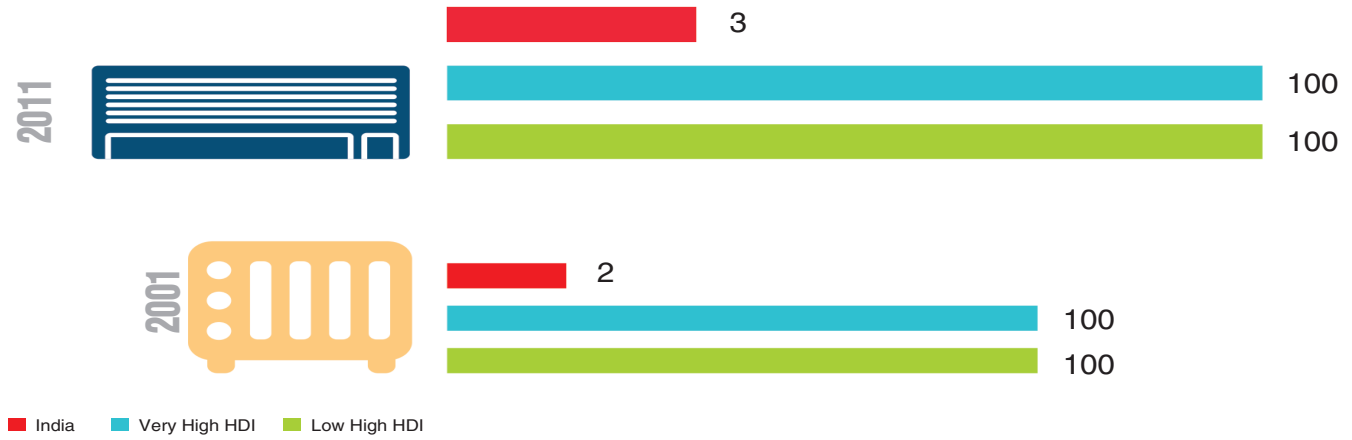
Comparison between Telephone (fixed lines) of India and High HDI Country (% of households)



Comparison between Refrigerator of India and High HDI Country (% of households)



Comparison of Space Heating and Cooling of India and High HDI Country (% of households)



The Story in Short

- Wide gaps in development between India and countries that have a high HDI rank or score.

- Further, even basic amenities such as availability of tap water supply or latrines at home are still beyond the reach of a majority of Indian households.

- More than 95% Indian households still do not have access to appliances such as refrigerators or air conditioners (taken as a proxy for the ability to regulate extreme temperatures at their homes by people).

- A comparison of India's composite index and trends of growth for two different points of time, tends to indicate that at that pace of growth, it could take up to 30 years for India to reach the development thresholds of even countries that are at the lower end of the spectrum of High HDI Countries.

What could it Mean for India

- India needs to proactively change its development policies to usher in more inclusive growth
- There presents huge opportunities for India in greening its new infrastructure, since many of this has to be newly built
- Need to look at development holistically – and energy could be one of the main drivers for pushing for a holistic development approach
- Linked to the above, any development pathway that India follows needs to factor in its impact on various indicators and not just one indicator.
- While the additional cost of opting for low carbon option could be a short term limitation, access to financial resources should not really be a constraint, if long term effects and impacts are factored in