

Urbanisation in India Challenges of Equity, Crisis Management & Sustainability

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SPECIAL FOUNDATION COURSE

AT

**DR. MARRI CHANNA REDDY HUMAN RESOURCE
DEVELOPMENT INSTITUTE OF TELANGANA**

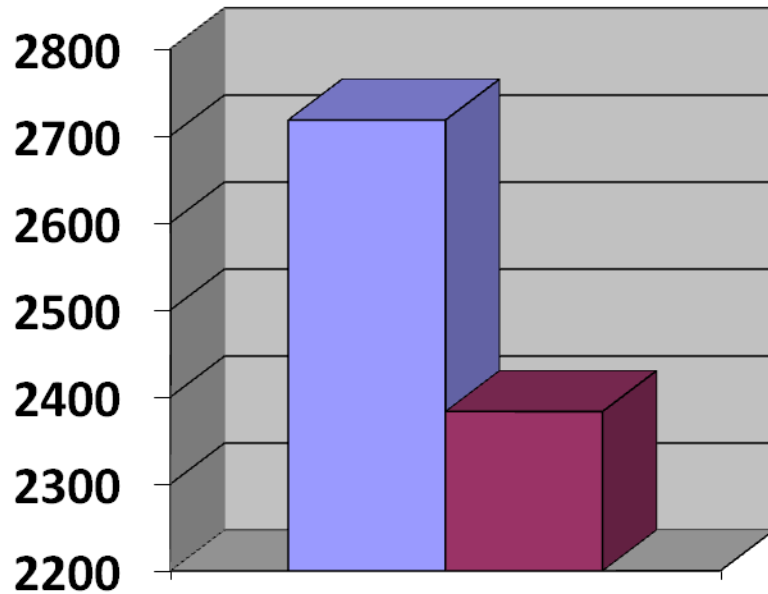
The 3rd March 2021

Would Urbanisation of Future be Equitable?

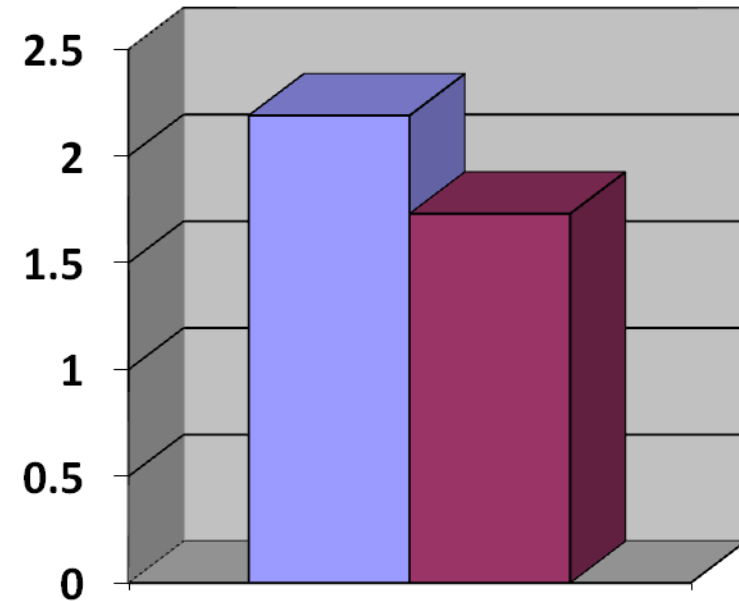
- Equitable cities permit migration of poor resulting in high demographic growth
- Migrants have access to employment and amenities
- Equitable urbanisation imply peripheries are included within city limits and
- Emergence of a large number of new census and statutory towns

Equitable Urbanisation would generally imply rapid urban growth

Projected Urban Population for Asia in 2025 and its Growth Rate during 2025-30 as given in World Urbanization Prospects



Urban Population in Asia 2025



Growth in Urban Population in

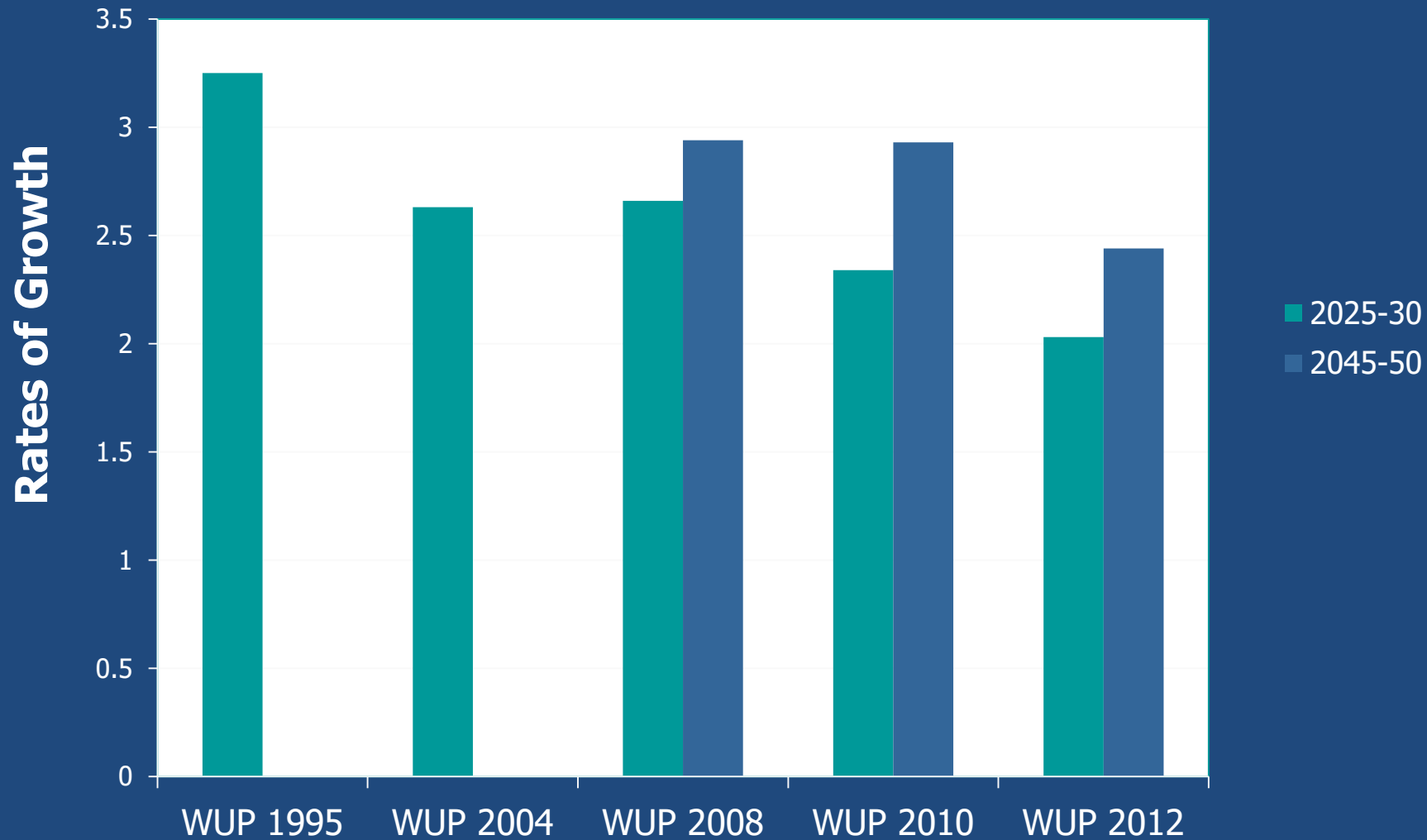


WUP Revision 1994

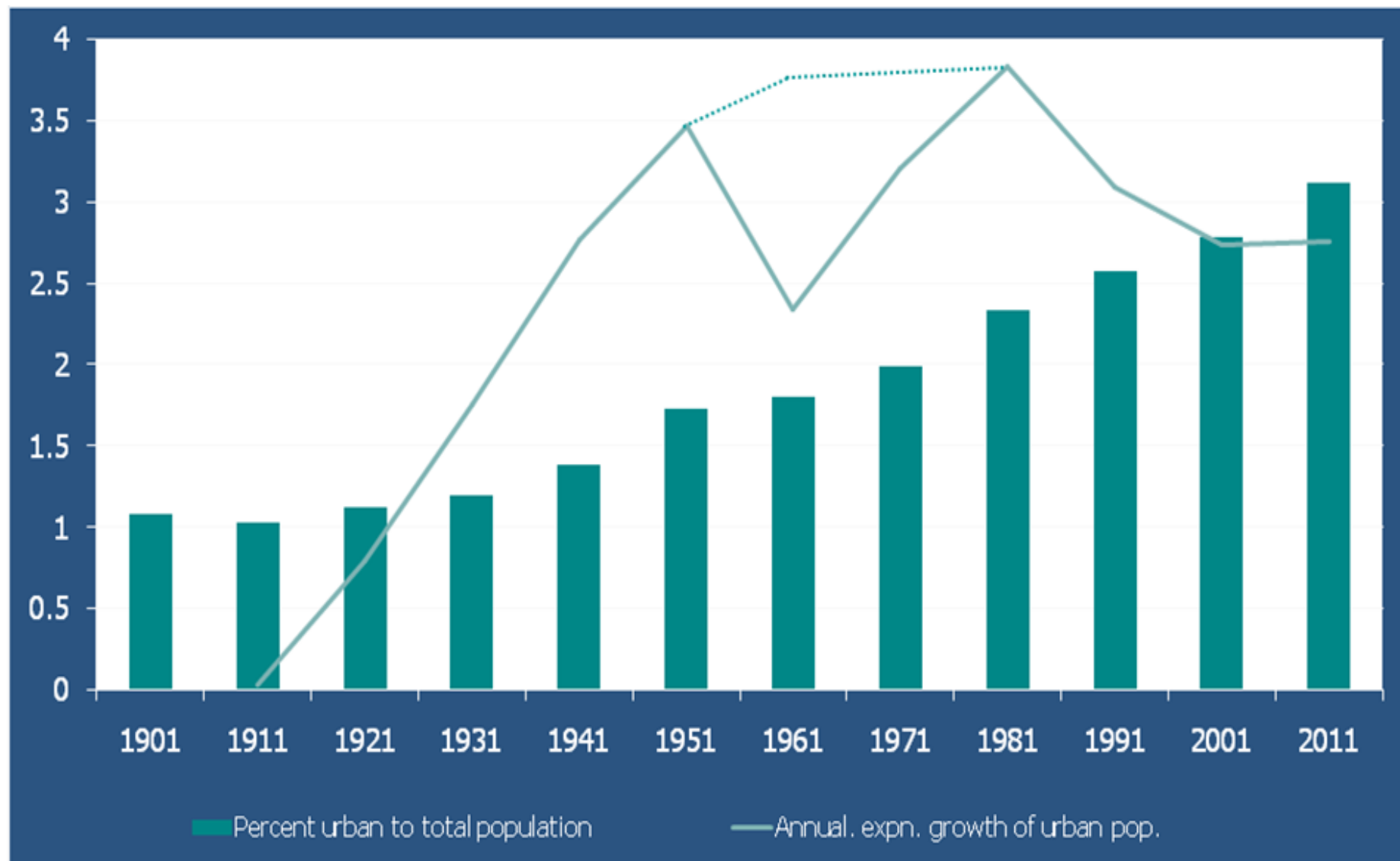


WUP Revision 2018

Growth Rates of Urban Population in India as Projected in World Urbanisation Prospects (WUP)



Per cent Urban Population and Urban Growth Rates 1901-11

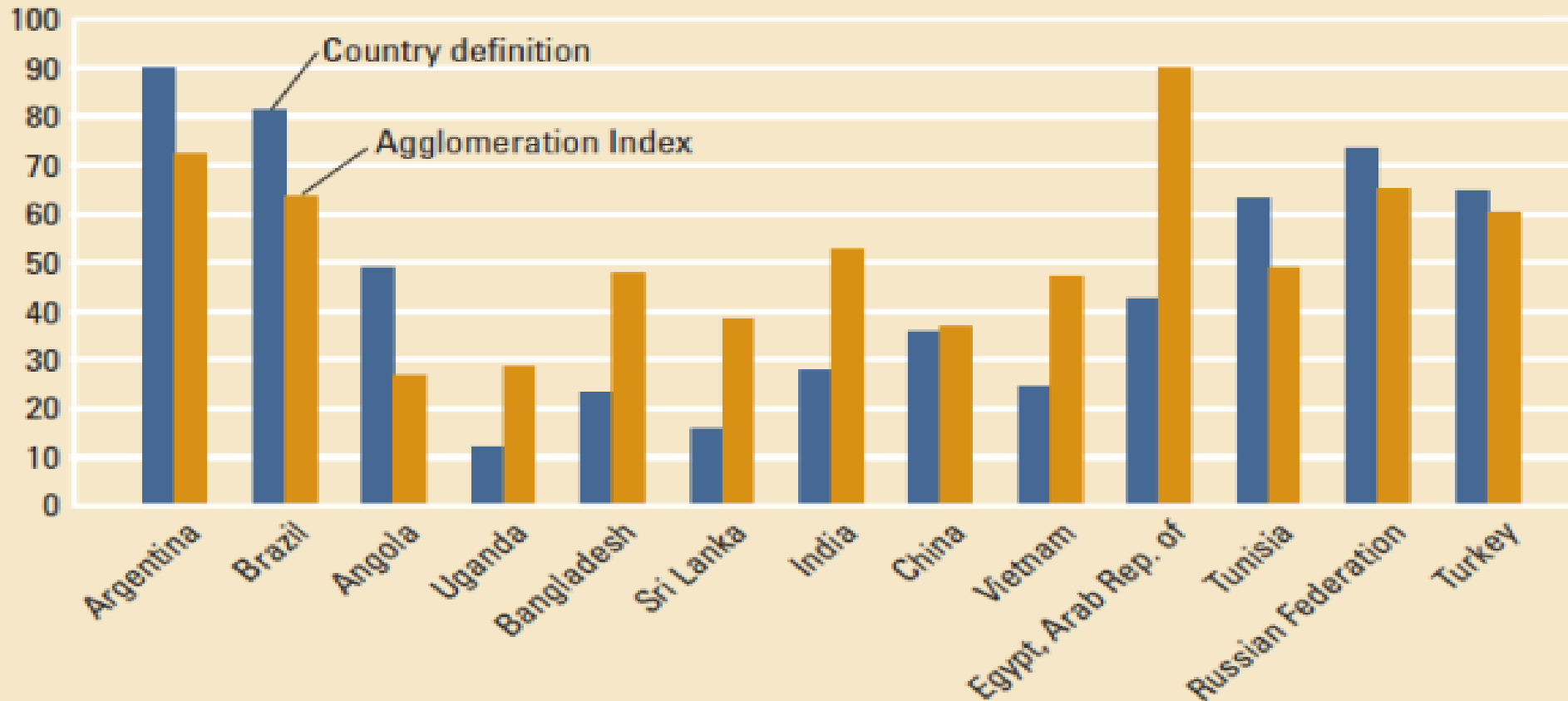


**Percentage of Urban Population from UNPD and
Agglomeration Index of the World Bank (WDR 2009)
in Asian Countries**

Country	National Census UNPD (WUP2011)	Agglomeration Index World Bank WDR 2009
Bangladesh	23.2	48.0
India	28.7	52.4
Pakistan	33.2	53.6
Sri Lanka	15.7	38.2
China	36.0	37.0

Satellite data based Agglomeration Index for developing countries from WDR 2009

Urban share (%)



Sources: Chomitz, Buys, and Thomas 2005; Nelson 2008; Satterthwaite 2007; United Nations 2006c.

a. The GRUMP human settlements database was developed by the Center for International Earth Science Information Network (CIESIN) at Columbia University (<http://sedac.ciesin.columbia.edu/gpw/index.jsp>).

b. LandScan was developed by Oak Ridge National Laboratory (<http://www.ornl.gov/sci/landscan/>).

Percentage of migrants (POLR) in the population as per decennial censuses

Source: Compiled from Census tables on Migration.

Include estimated figures of J&K an Assam where applicable

	Census years				
	1971	1981	1991	2001	2011
Total	29.1	30.3	27.4	30.1	37.5
Male	17.5	17.2	14.7	17.0	22.6
Female	41.7	44.3	41.2	44.6	53.2

Total Net Inter-State Migration for India (Economic Survey 2017)

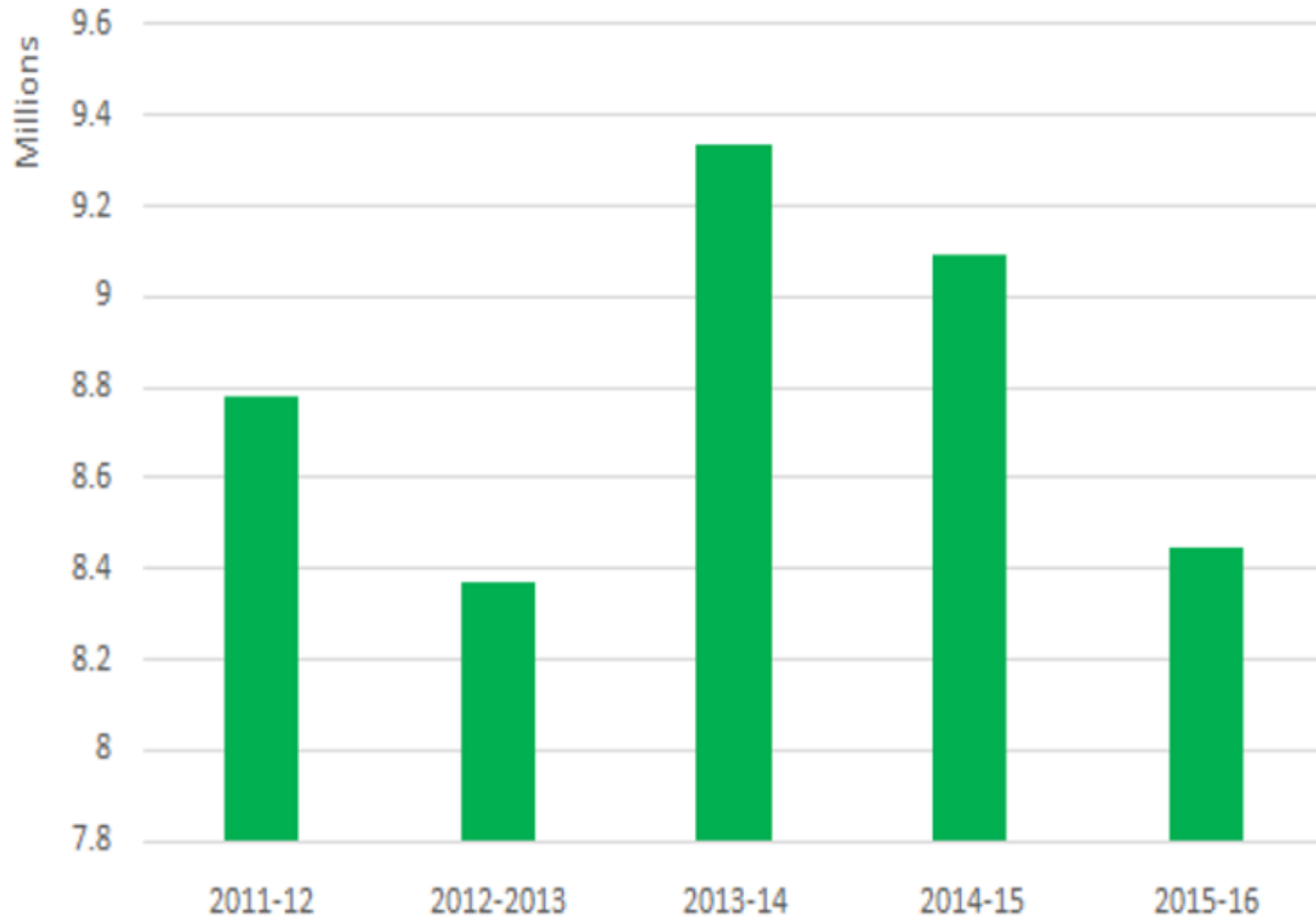


Table 3: Decomposition of Total Incremental Urban Population into Components

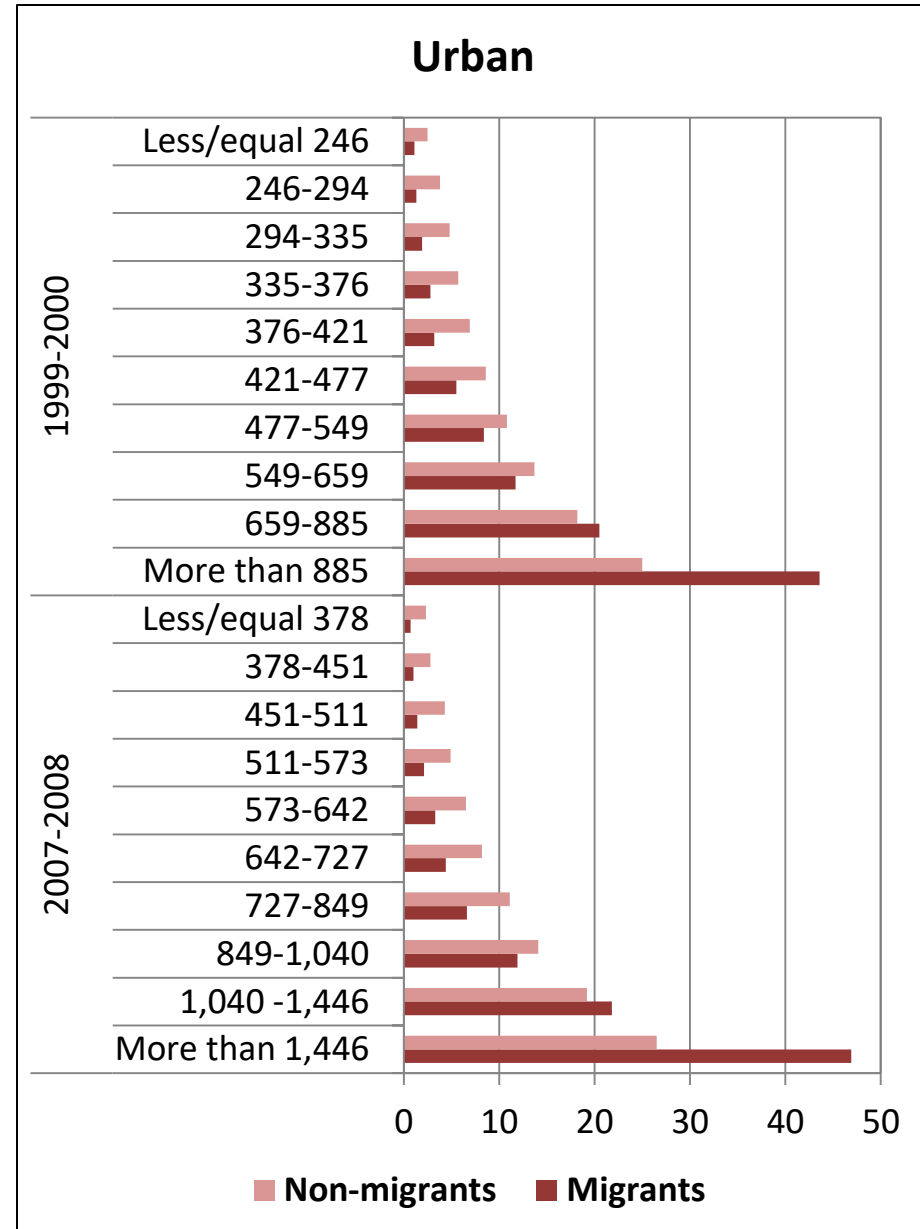
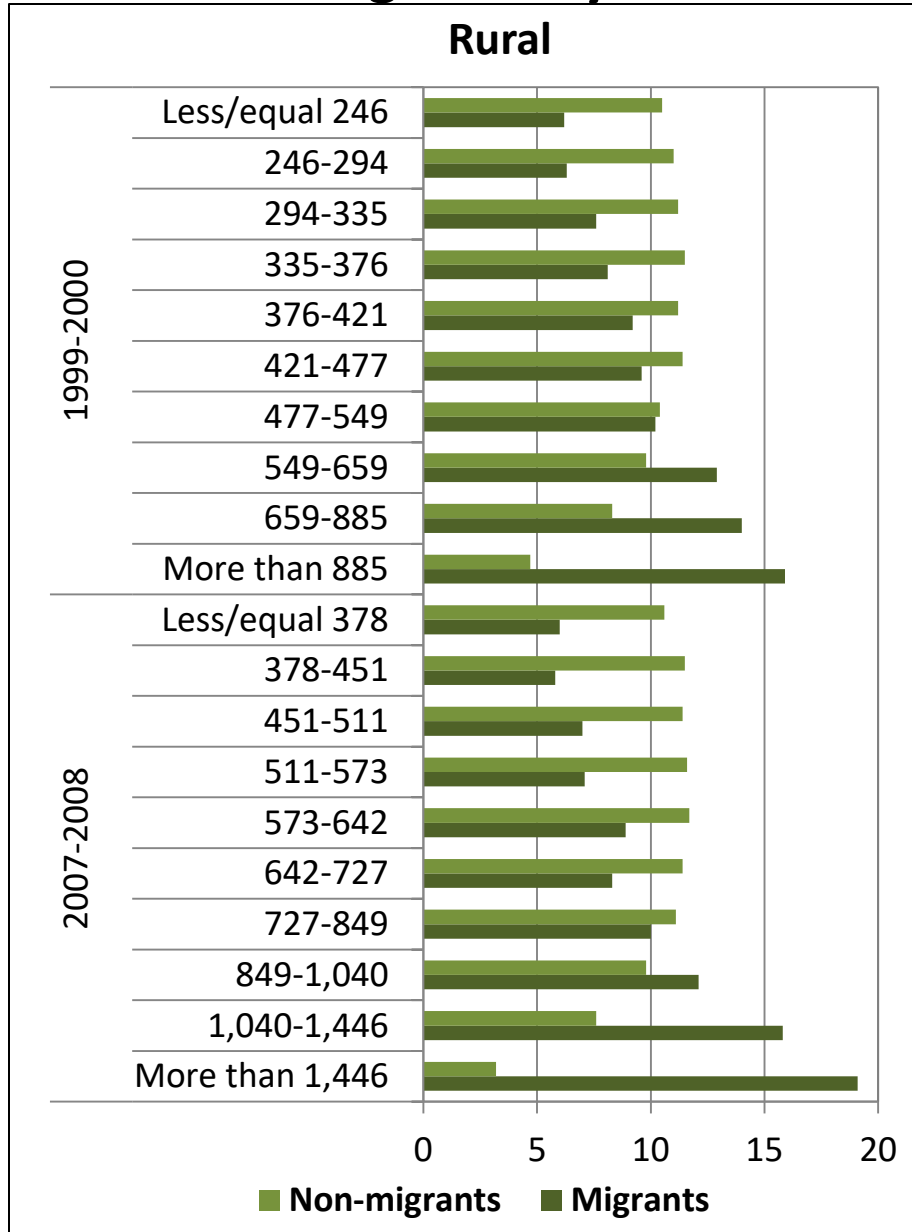
	Percentage Distribution	
	1991-01	2001- 2011
Total increase (in millions)	67.7	90.2
(a) Natural increase on base year pop and on inter-censal migrants	59.4	48.4
(b) Population of new towns less declassified towns	6.2	31.8
(c) Net RU migration	21.1	15.5
(d) Increase due to expansion in U Area and merging of towns	13.0	4.3

Occupation Structure of Migrant and Non-Migrant Workers

	Male				Female			
	Rural		Urban		Rural		Urban	
Industry	N- Mig	Mig	N- Mig	Mig	N- M	Mig	N- M	Mig
Primary	65%	37%	7%	3%	76%	84%	10%	15%
Manufact	8%	17%	22%	27%	12%	6%	28%	23%
Pub Serv	4%	11%	8%	11%	6%	5%	34%	34%
Construct	8%	10%	10%	9%	2%	2%	4%	6%
Trad Serv	12%	20%	41%	33%	4%	2%	15%	15%
Mod Serv	2%	5%	12%	16%	1%	1%	10%	8%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: NSS 2007-08

Percentage Distribution of Adult Male Migrants and Non-Migrants by Household Monthly Per Capita Expenditure



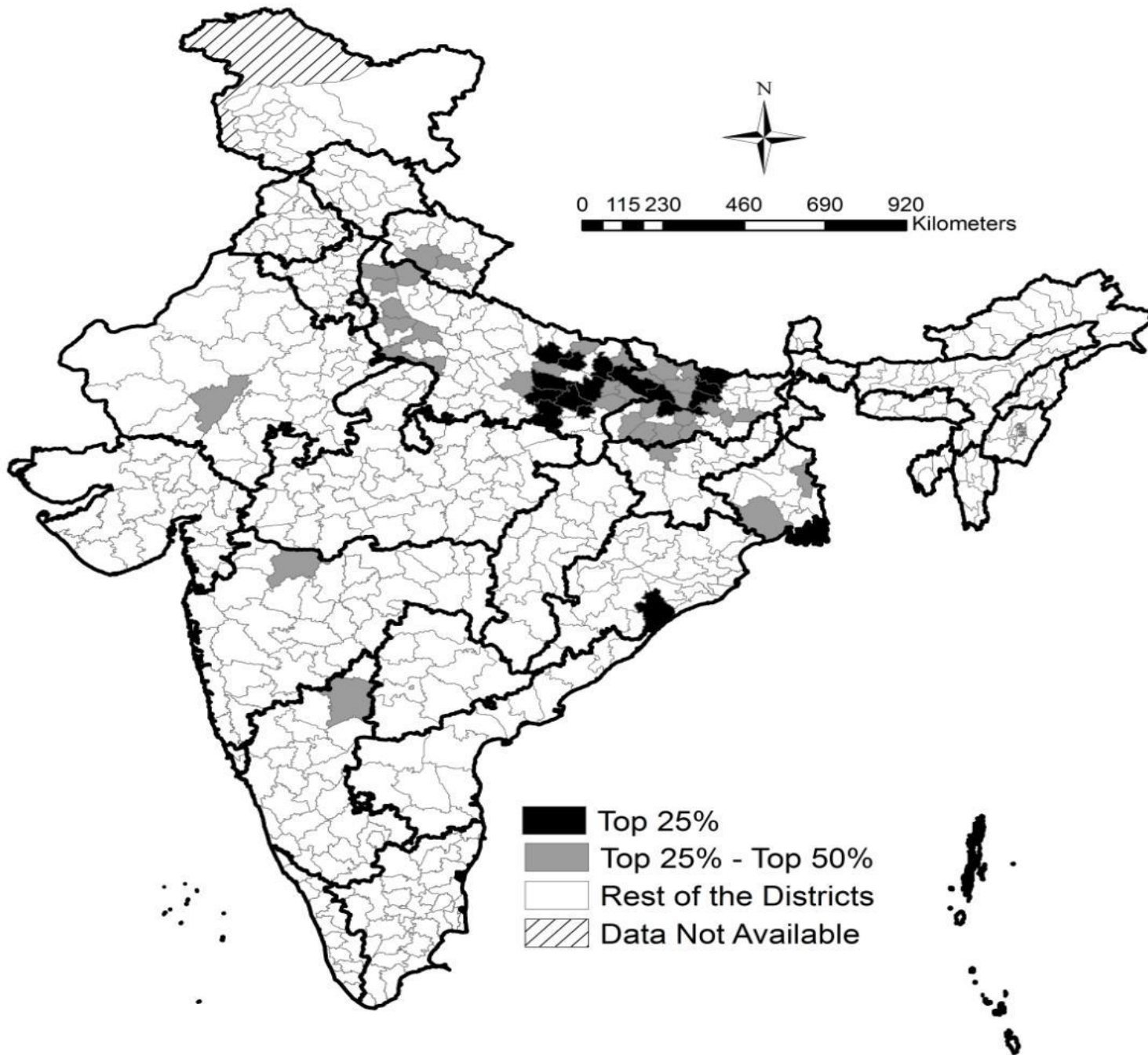
Issues concerning Equity in Urbanisation

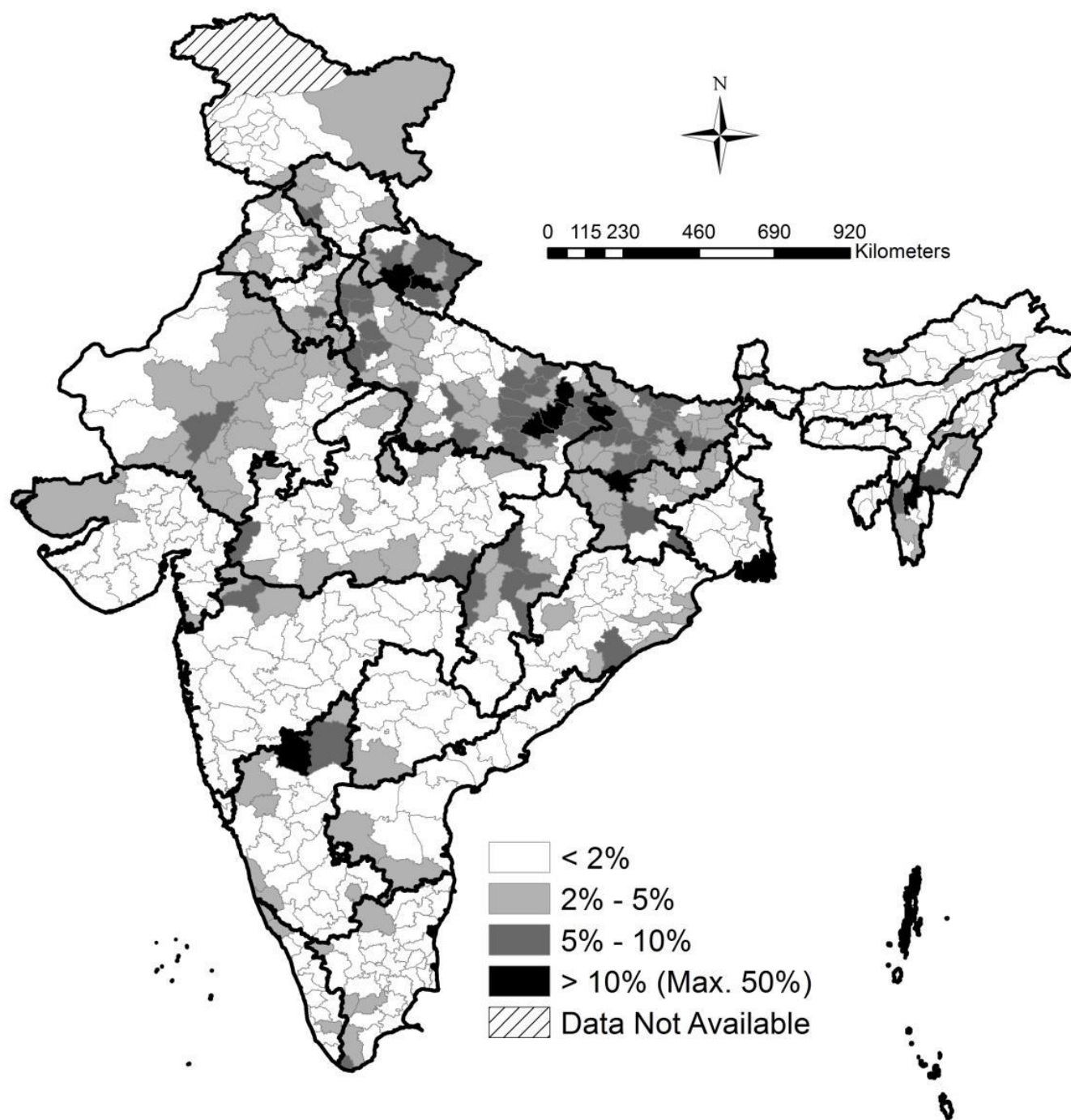
- Top heavy urban structure: High concentration in million plus cities. Emergence of a few small towns**
- No linkages of the city core with periphery; Suburban development haphazard and messy. SDG 11 talks of cities to plan for sustainability, safety of population**
- Reluctance to include new towns & peripheries in urban fold. SDG 11: Linking with small towns, interacting with semi urban and city periphery; balanced settlement structure.**
- RU migration of poor & vulnerable slowed down**

Crisis Managment

Pandemic, Premature Deindustrialisation
and Crisis Management

Key Districts Accounting for Male Inter-State Out Migration from Rural To Urban Areas as per Census of 2001





Districts with a high level of inter-state out-migration intensity (inter-state male out-migrants from rural areas) as per 2001 census

Percentage Share of In-Migrants across States

States/Uts	NSS 2007-08			Census 2011	
	Inter State	International	Total	Inter state	International
Jammu and Kashmir	0.25	0.03	0.51	0.29	0.65
Himachal Pradesh	0.80	2.10	0.85	0.73	1.10
Punjab	5.24	6.38	2.77	4.59	5.05
Uttaranchal	2.97	0.76	1.12	2.30	1.50
Haryana	6.65	1.49	2.50	6.68	2.92
Delhi	13.01	2.50	1.92	11.67	3.24
Rajasthan	5.07	3.74	6.16	4.80	2.99
Uttar Pradesh	9.21	8.90	15.86	7.49	6.47
Bihar	1.57	0.64	5.33	2.05	7.26
Assam	0.31	0.27	1.17	0.91	2.01

Percentage Share of In-Migrants across States

States/Uts	NSS 2007-08			Census 2011	
	Inter State	International	Total	Inter state	International
West Bengal	5.19	35.74	7.94	4.39	36.53
Jharkhand	1.17	0.00	1.47	4.05	0.58
Orissa	1.59	0.13	3.82	1.58	1.34
Chhattisgarh	2.88	0.38	2.55	2.34	1.15
Madhya Pradesh	3.88	0.57	5.96	5.06	1.64
Gujarat	6.15	1.97	5.55	7.22	1.59
Maharashtra	16.59	7.42	12.08	16.75	5.91
Andhra Pradesh	3.00	1.11	8.22	2.93	2.51
Karnataka	6.00	0.54	4.92	5.98	1.92
Goa	0.57	0.24	0.15	0.50	0.27
Kerala	2.36	15.68	3.50	1.21	2.80
Tamil Nadu	2.70	5.33	4.95	3.04	4.92
UT	2.41	0.66	0.36	1.17	0.24
NE	0.44	3.42	0.33	0	5.17
Total	100	100	100	100	100

Select Indicators from Housing Amenities (Percent to total HHs)

Source: Household Tables, Census 2011

India/State/Cities	Urban HHs	One room HHs	HHs no tap	HHs no latrine	HHs in slums
INDIA	78865937	32.1	33.1	18.6	17.2
Maharashtra	10813928	41.7	22.3	28.7	22.3
Karnataka	5315715	29.6	32.6	15.1	13.1
Tamil Nadu	8929104	36.7	47.7	24.9	16.3
West Bengal	6350113	41.7	46.9	15.0	21.4
Delhi NCT	3261423	32.3	21.3	10.2	11.4
Delhi (M. Corp)	2251616	30.1	15.6	10.8	16.5
Kolkata (M. Corp)	964183	42.5	27.8	5.1	29.3
Pune (M. Corp)	733990	35.3	9.0	20.8	18.7
Gr. Mumbai (MC)	2665481	57.3	21.1	42.4	40.0
Gr. Banga (MC)	2105894	32.1	19.6	3.2	7.8
Chennai (MC)	1106567	38.6	24.2	4.4	28.0

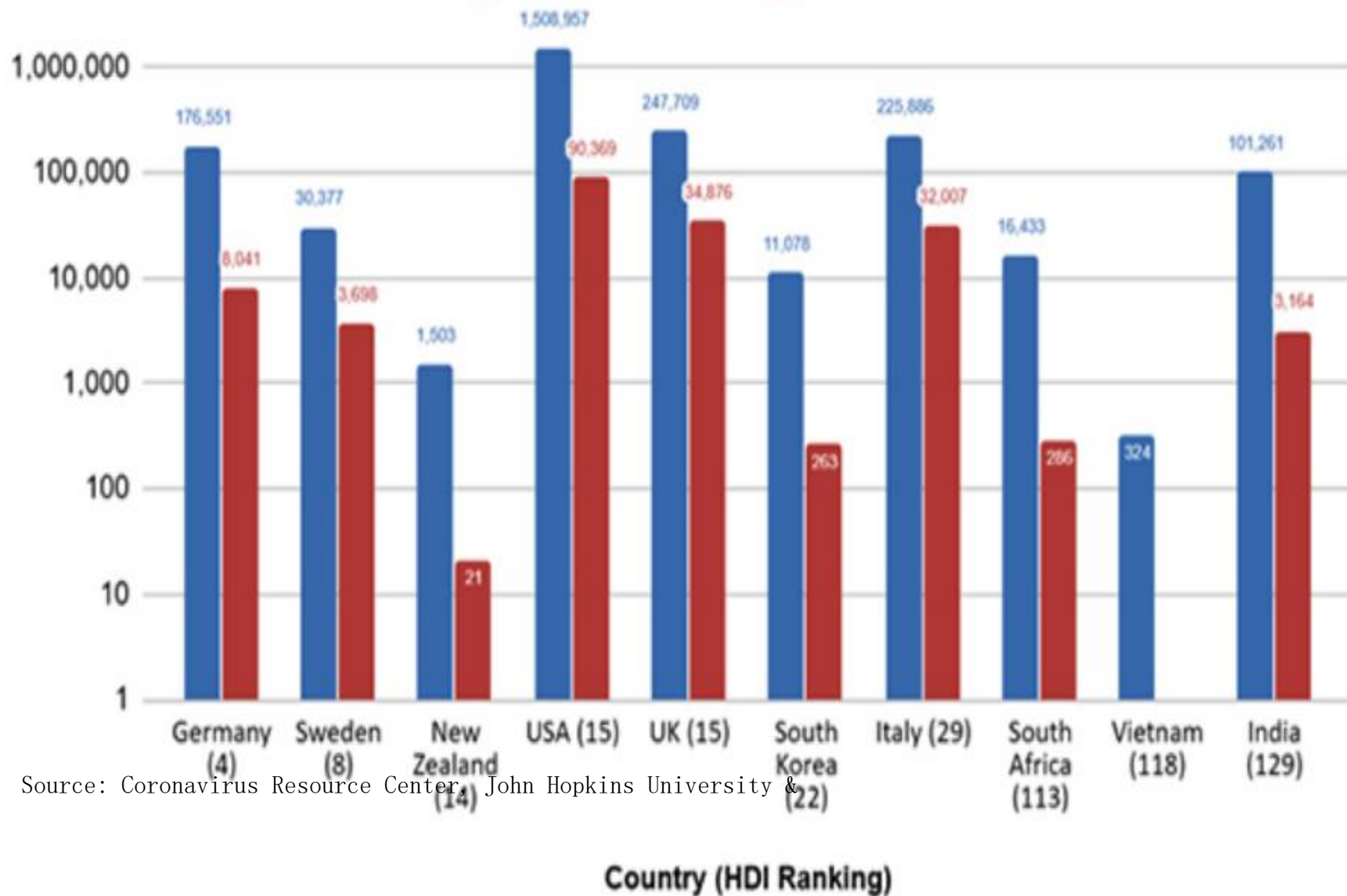
Select Indicators from Housing Amenities

Source: Household Tables, Census 2011

India/State/Cities	Total Urban Households	HHs without Excl Room	HHs with one dwelling room	HH with couple without excl room
INDIA	78865937	3.1	32.1	2.1
Maharashtra	10813928	4.9	41.7	3.2
Karnataka	5315715	7.1	29.6	5.2
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COVID and HDI

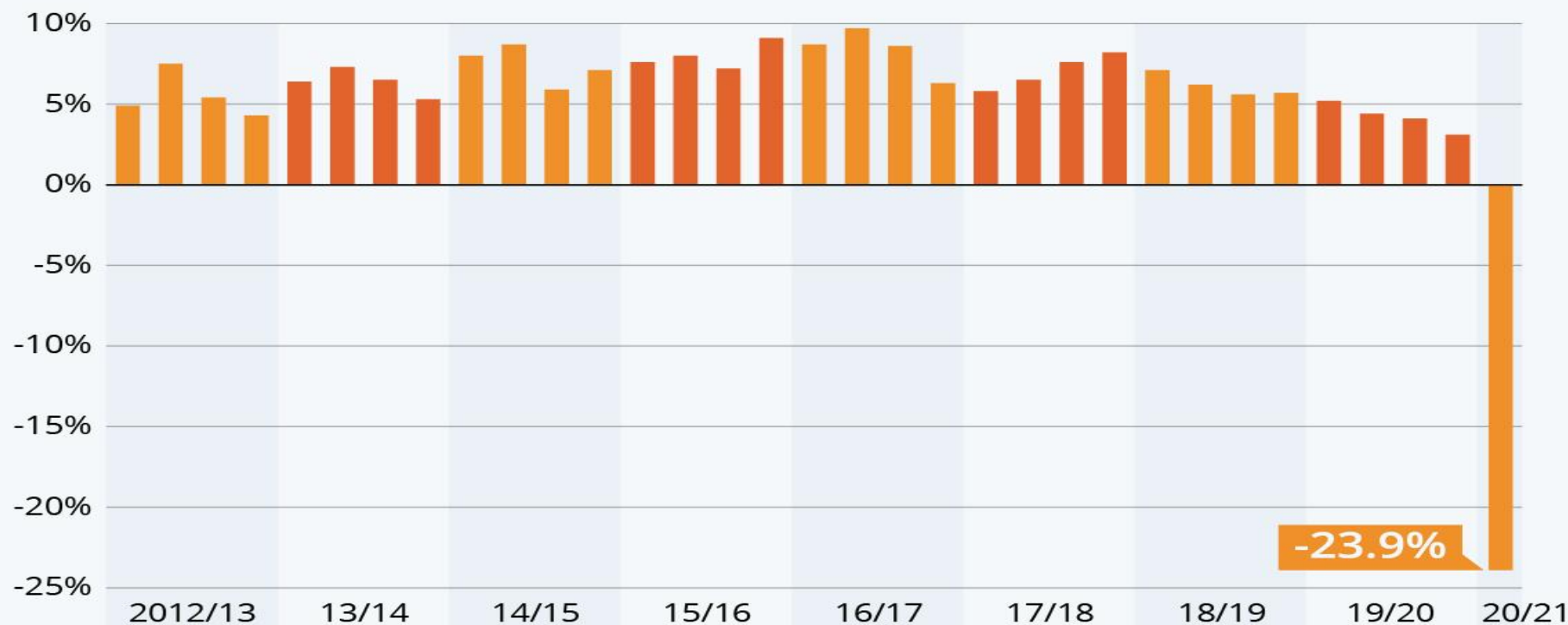
COVID-19 Infections Deaths



Source: Coronavirus Resource Center, John Hopkins University &

India's GDP Collapses In Face of Pandemic

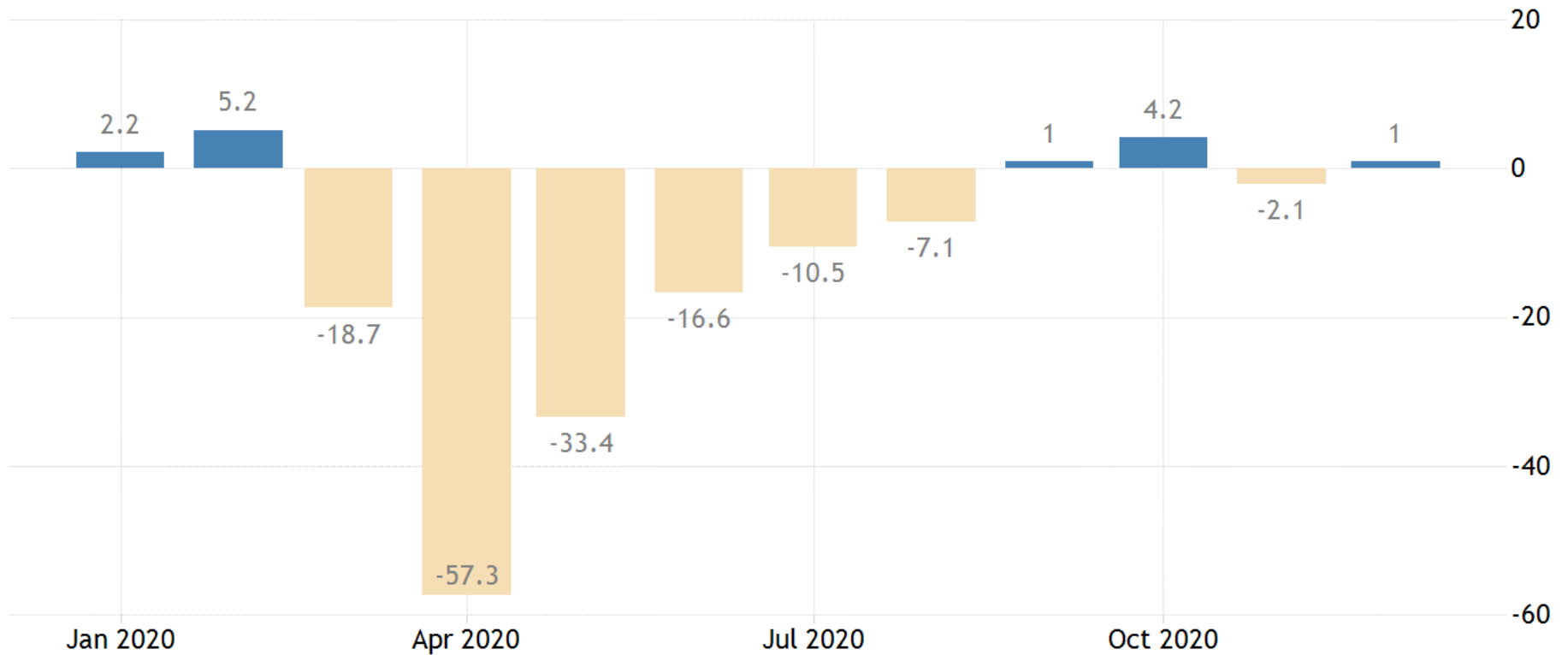
Quarterly GDP growth in India
(year-over-year, at constant 2011-12 prices)*



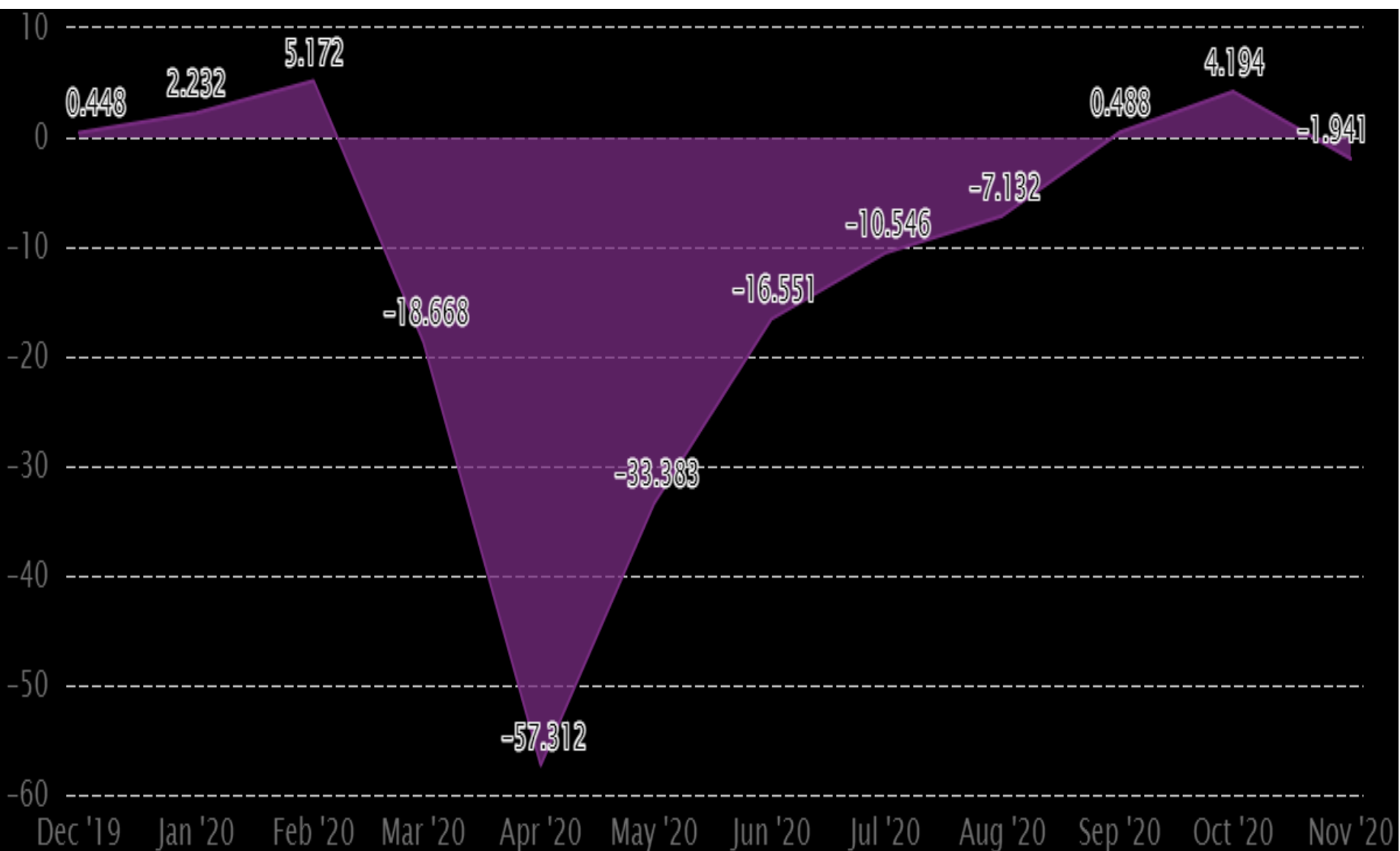
* India's financial year runs from April 1 to March 31

Source: Indian Ministry of Statistics and Programme Implementation

India Industrial Production 2020 Data



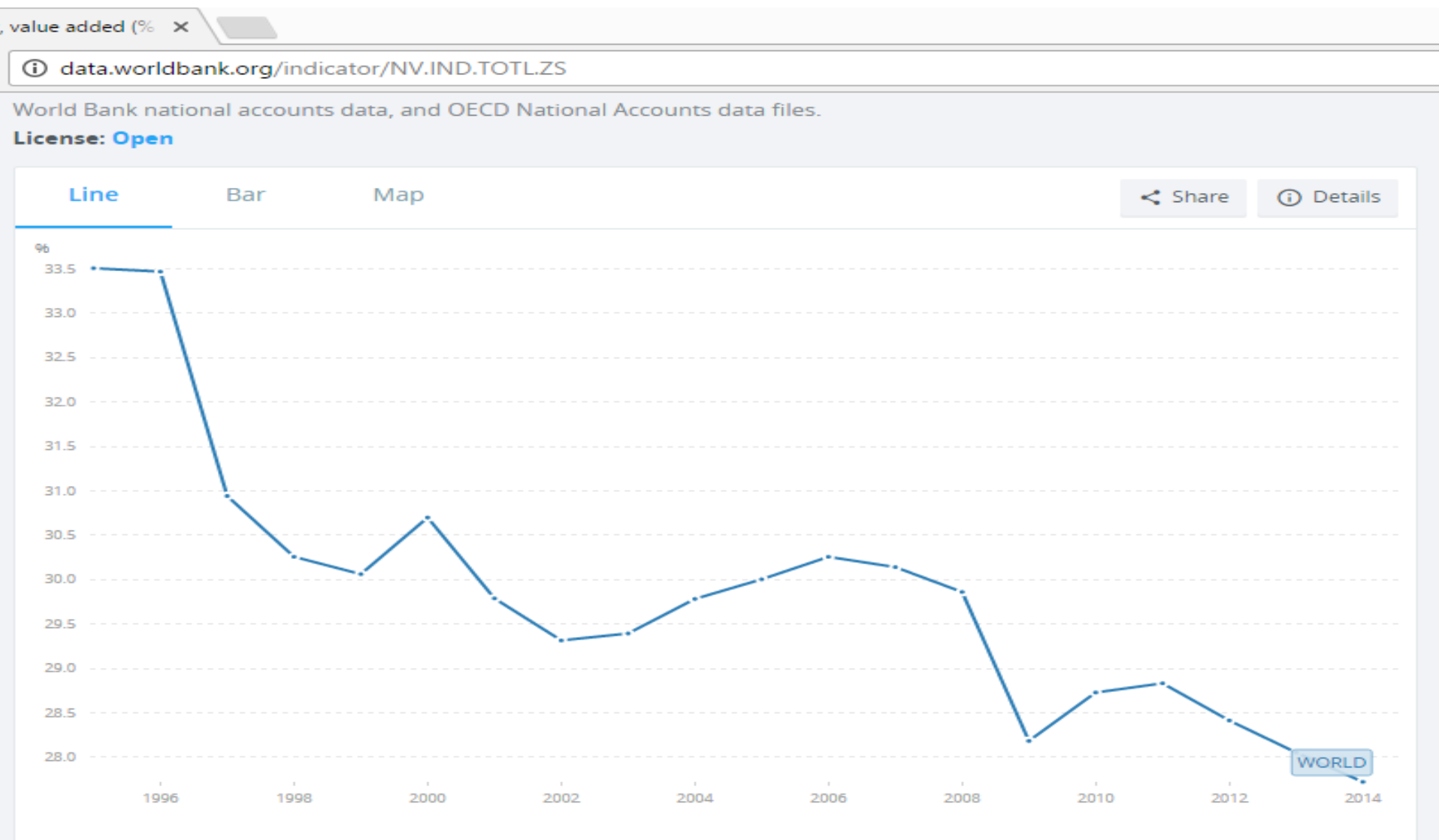
SOURCE: [TRADINGECONOMICS.COM](https://tradingeconomics.com) | MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION (MOSPI)



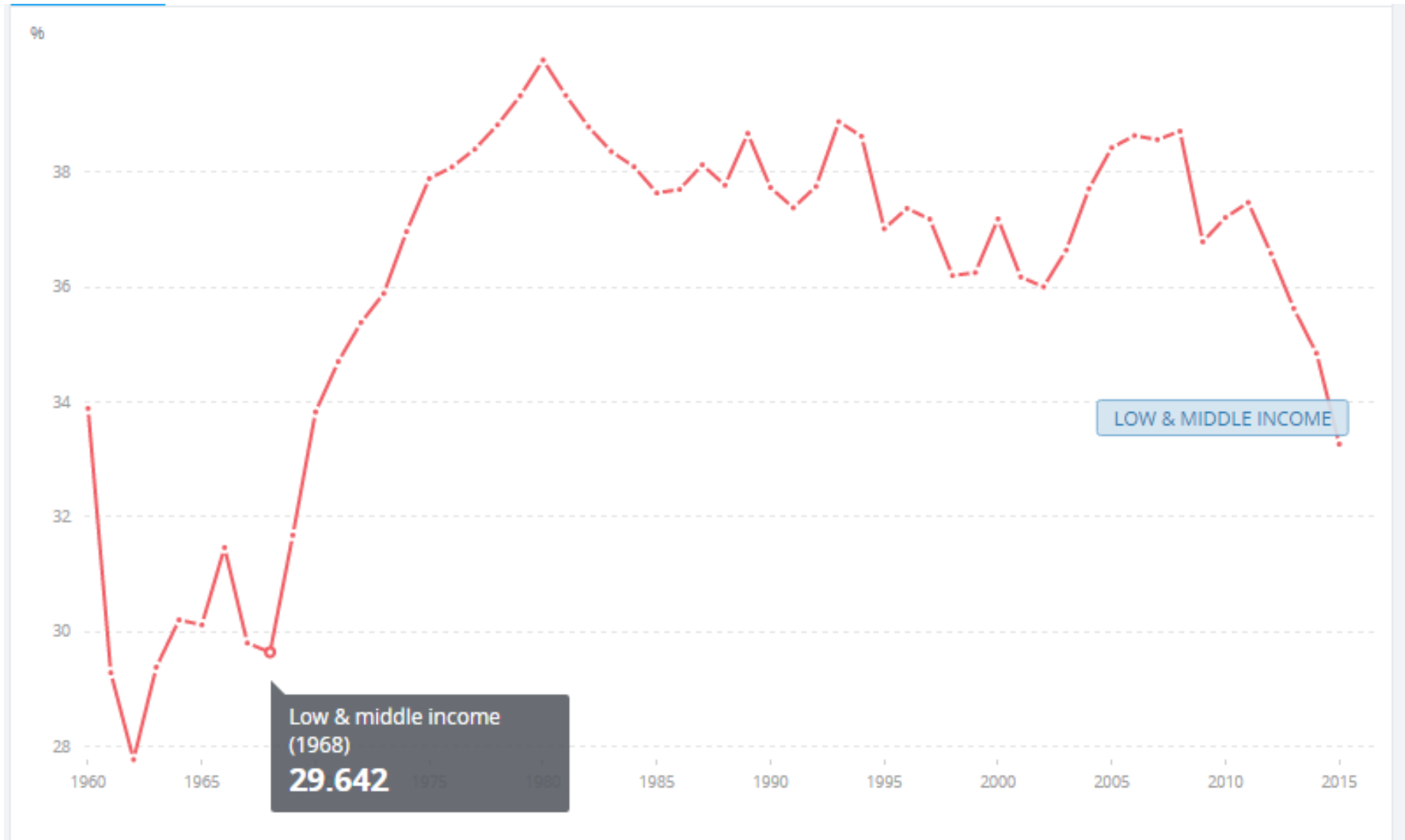
Industrial Production Index: YoY: Monthly: India

Premature Deindustrialisation and Middle Income Trap in Developing Countries (**Dani Rodrik**)

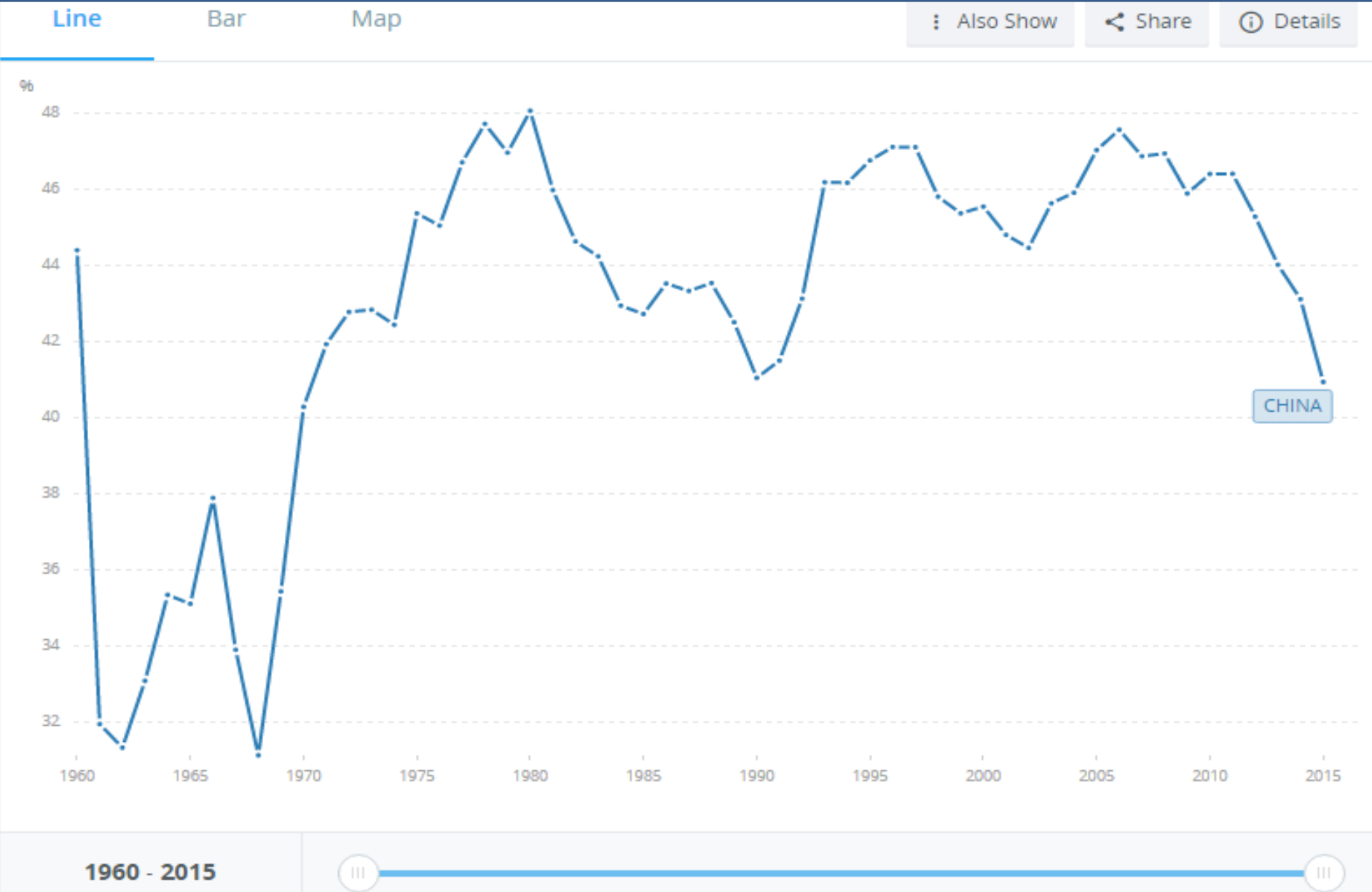
Percentage Share of Industries in GDP in the World



Percentage Share of Industries in GDP in the Low and Middle Income Countries

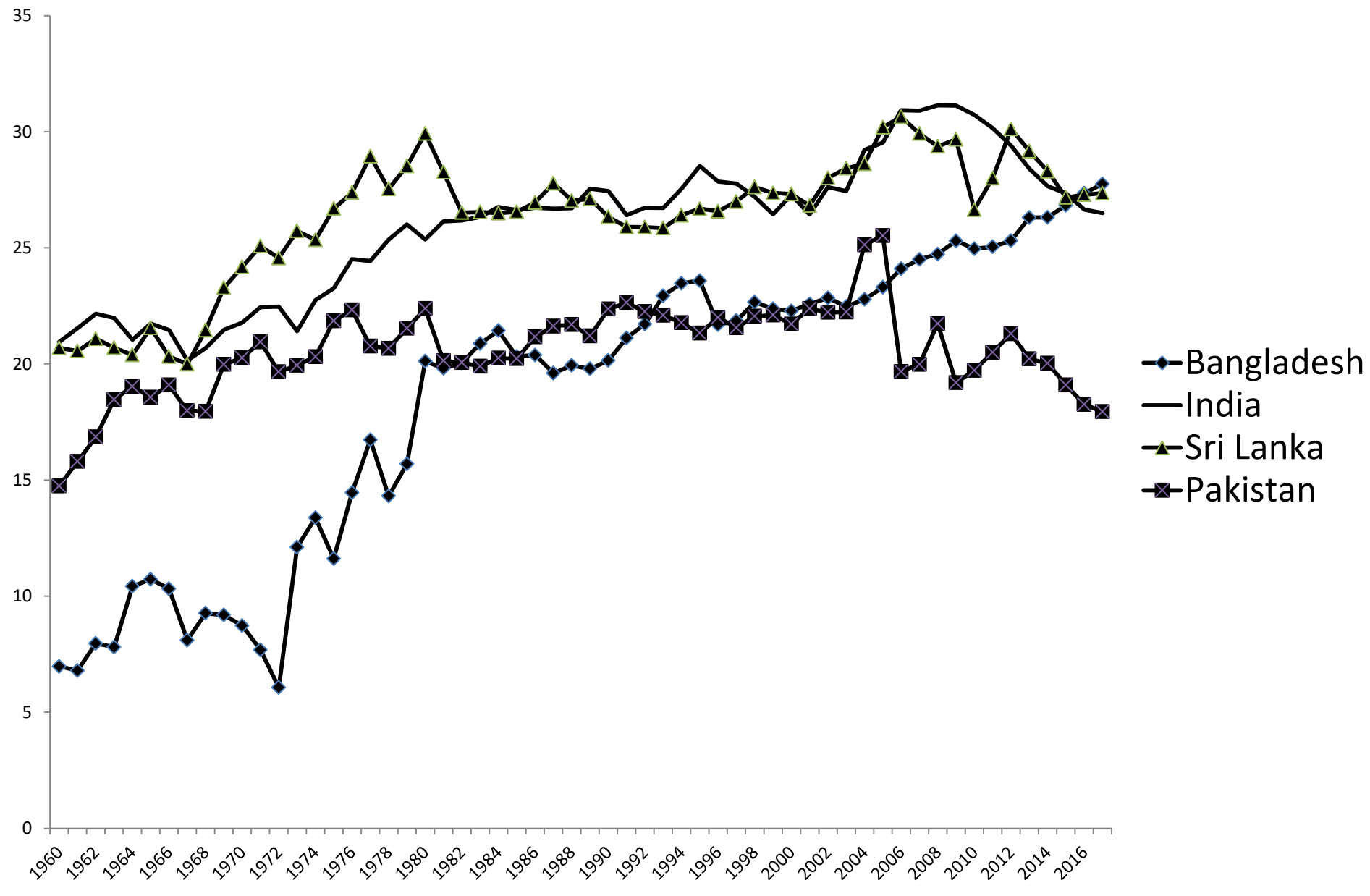


Percentage Share of Industries in GDP in China



Percentage Share of Industries in GDP in India

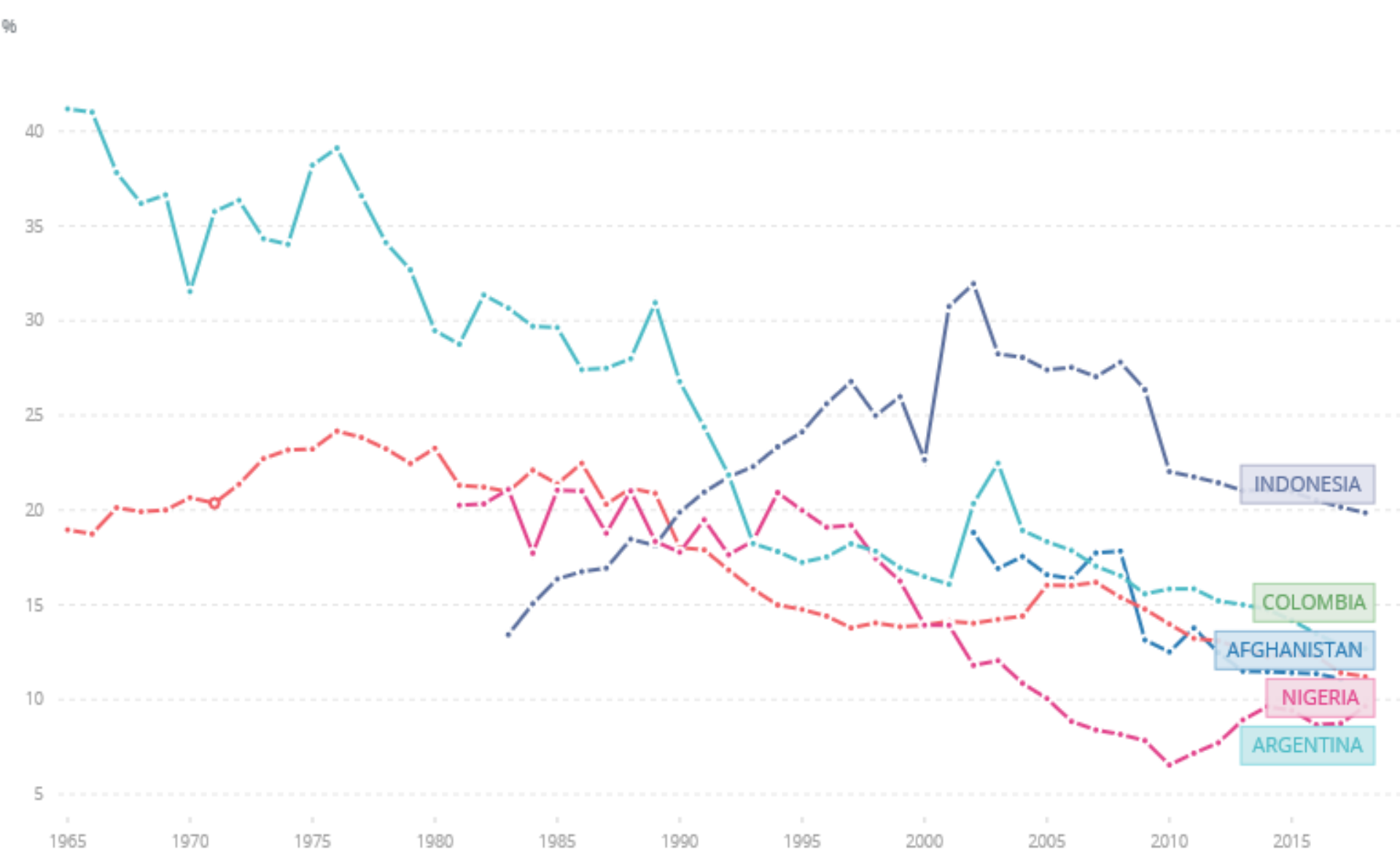




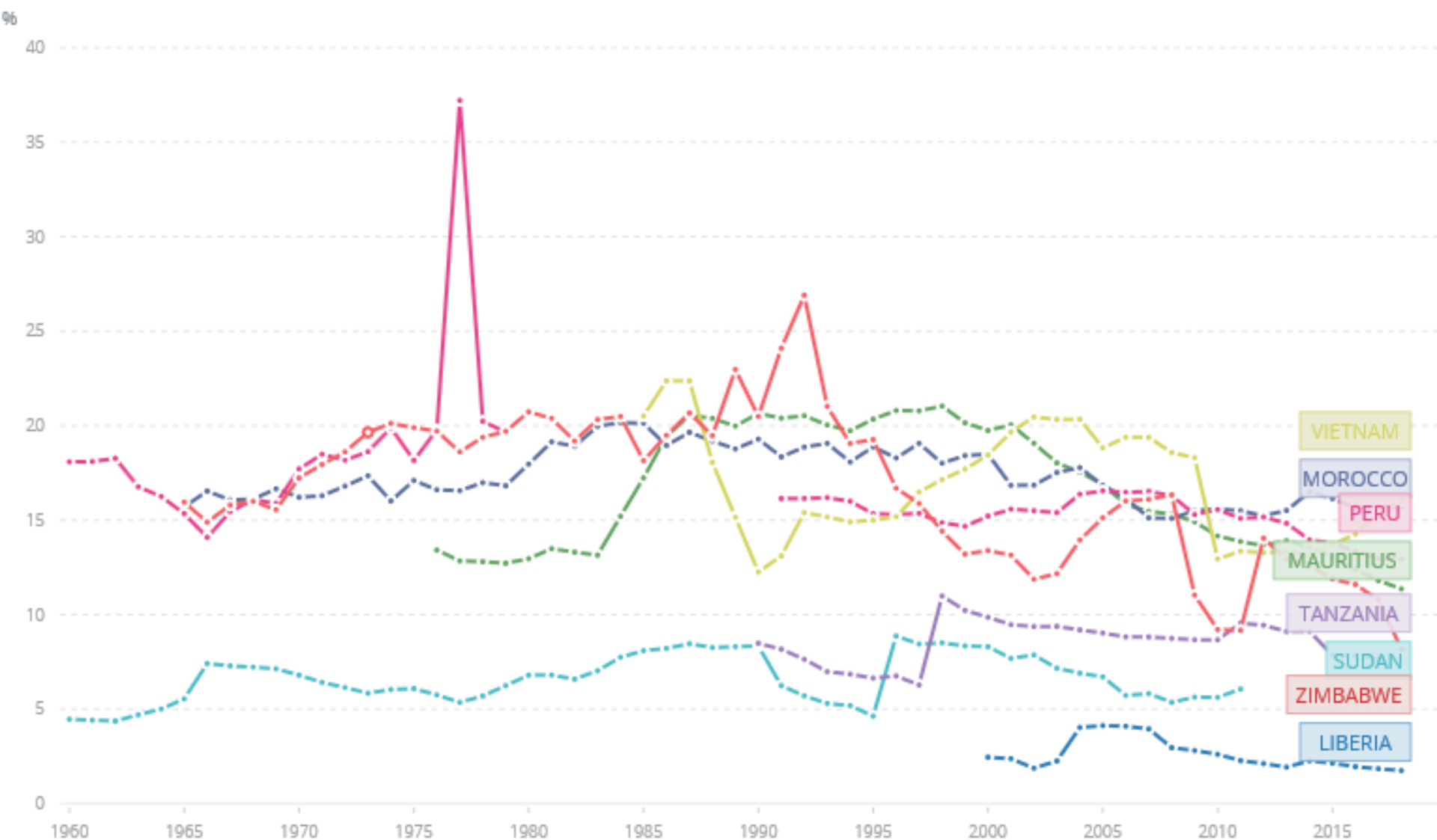
Manufacturing, value added (% of GDP) - Thailand



Manufacturing, value added (% of GDP) – Afghanistan, Argentina, Indonesia, Nigeria, Columbia,



Manufacturing, value added (% of GDP) - Liberia, Mauritius, Morocco, Peru, Sudan, Tanzania, Vietnam, Zimbabwe



Restrictions on Interstate Movement

- AP, TN and Karnataka have some law, ordinance or admn. orders to reserve jobs in certain categories for the locals or language proficiency in public sector; recommended also for pvt sector.
- Maharashtra and Gujarat having reservation for locals in public sector units
- Rajasthan, Madhya Pradesh West Bengal, Goa etc. are considering reservation at least in state sector

All these are against the Article 16 of the Constitution and the spirit of Inter-state migrant workmen Act, 1979

Covid19 Linked Relaxation in Labour Laws

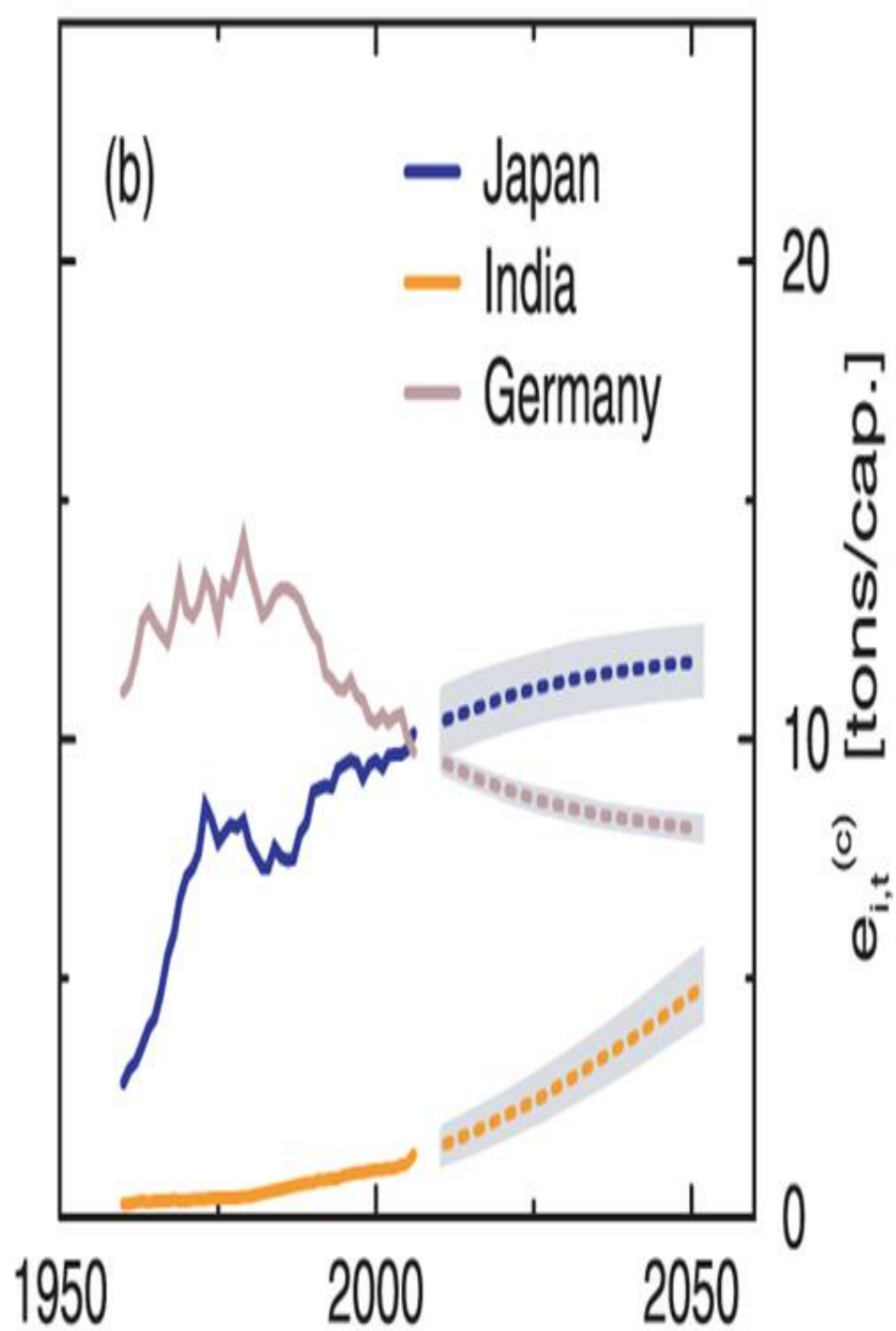
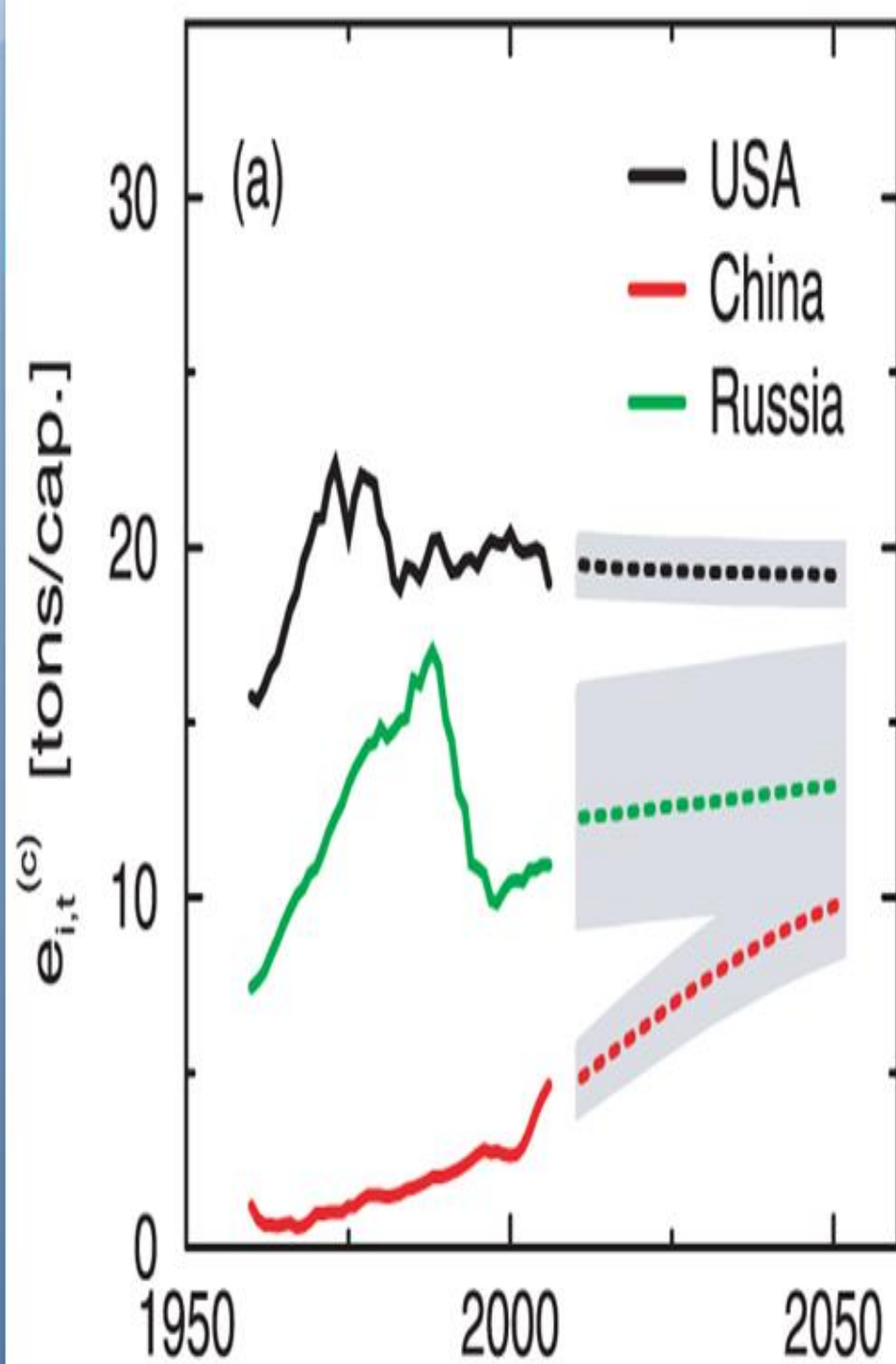
- Barring the provisions under the Factories Act, 1948 and, Construction Workers Act, 1996; Child Labour Act of 1986; Maternity Benefit Act, 1961; Equal Remuneration Act, 1976; Bonded Labour Act, 1976 etc. **all labour laws are suspended in UP**
- **In MP, Industrial Disputes Act, 1947 amended** allowing new establishments exemptions from most provisions under the Industrial Disputes Act, 1947, applicable for a period of thousand (1000) days subject to investigation and settlement of industrial disputes. Also exemption from Factories Act, 1948 and MP Factories Rules, 1962 for 3 months

Relaxation in Labour Laws in States

- **Gujarat** exempted all factories registered under the Factories Act, 1948 from provisions relating to weekly hours, daily hours, intervals for rest etc., with effect from April 20, 2020 applicable to new projects
- **Rajasthan** extended working hours of adult workers under the Factories Act, 1948 to 12 per day for 3 months. Overtime to be paid for additional 4 hours subject to a limit of 24 hours per week.
- **Himachal Pradesh** exempted factories registered under Factories Act, 1948 from provisions relating to weekly, daily, spread hours and interval of rest until July 20, 2020

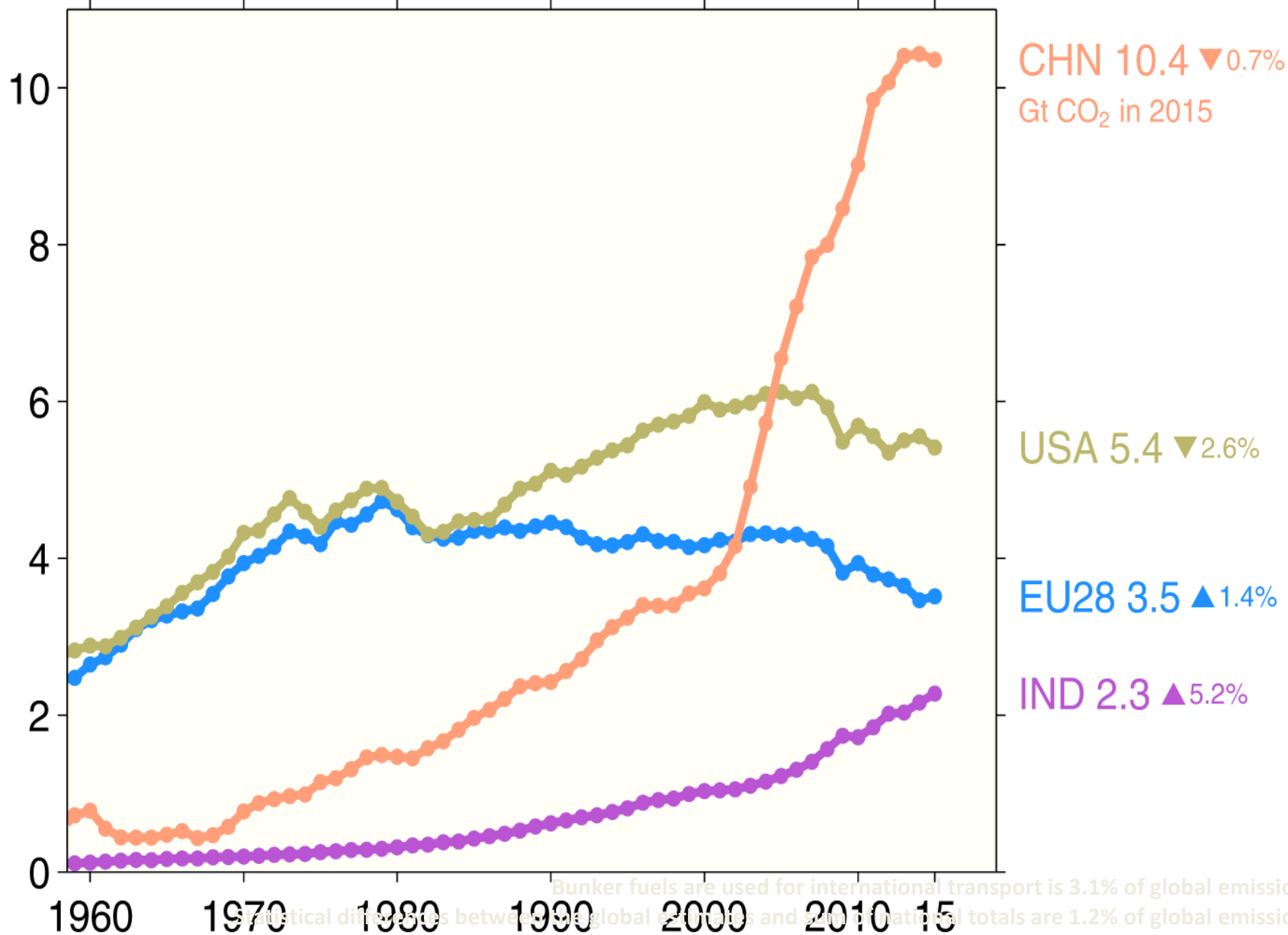
- History repeats itself but it can be transcended through foresight and planning. We should not be walking down this dangerous path.
- Revisit the modifications in Law by Dec 2020

Issues of Resilience



Data: CDIAC/GCP

CO₂ emissions (Gt CO₂/yr)



CHN 10.4 ▼0.7%

Gt CO₂ in 2015

USA 5.4 ▼2.6%

EU28 3.5 ▲1.4%

IND 2.3 ▲5.2%

Bunker fuels are used for international transport is 3.1% of global emissions.

Statistical differences between the global estimate and 2000 national totals are 1.2% of global emissions.

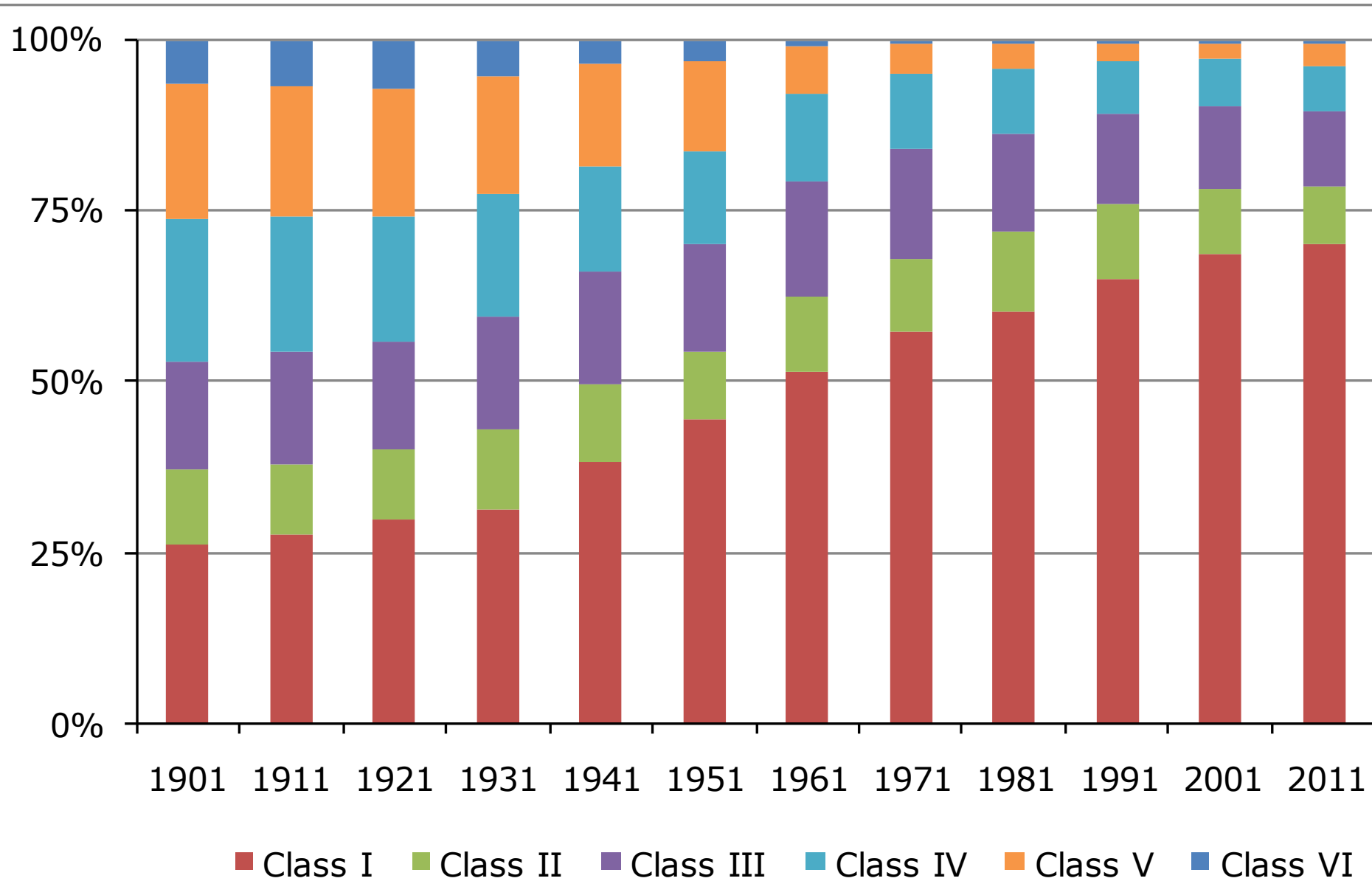
Source: [CDIAC](#) [Le Quéré et al 2016](#); [Global Carbon Budget 2016](#)

Percentage of Population in Cities with Population over 5 million to Total Urban Population

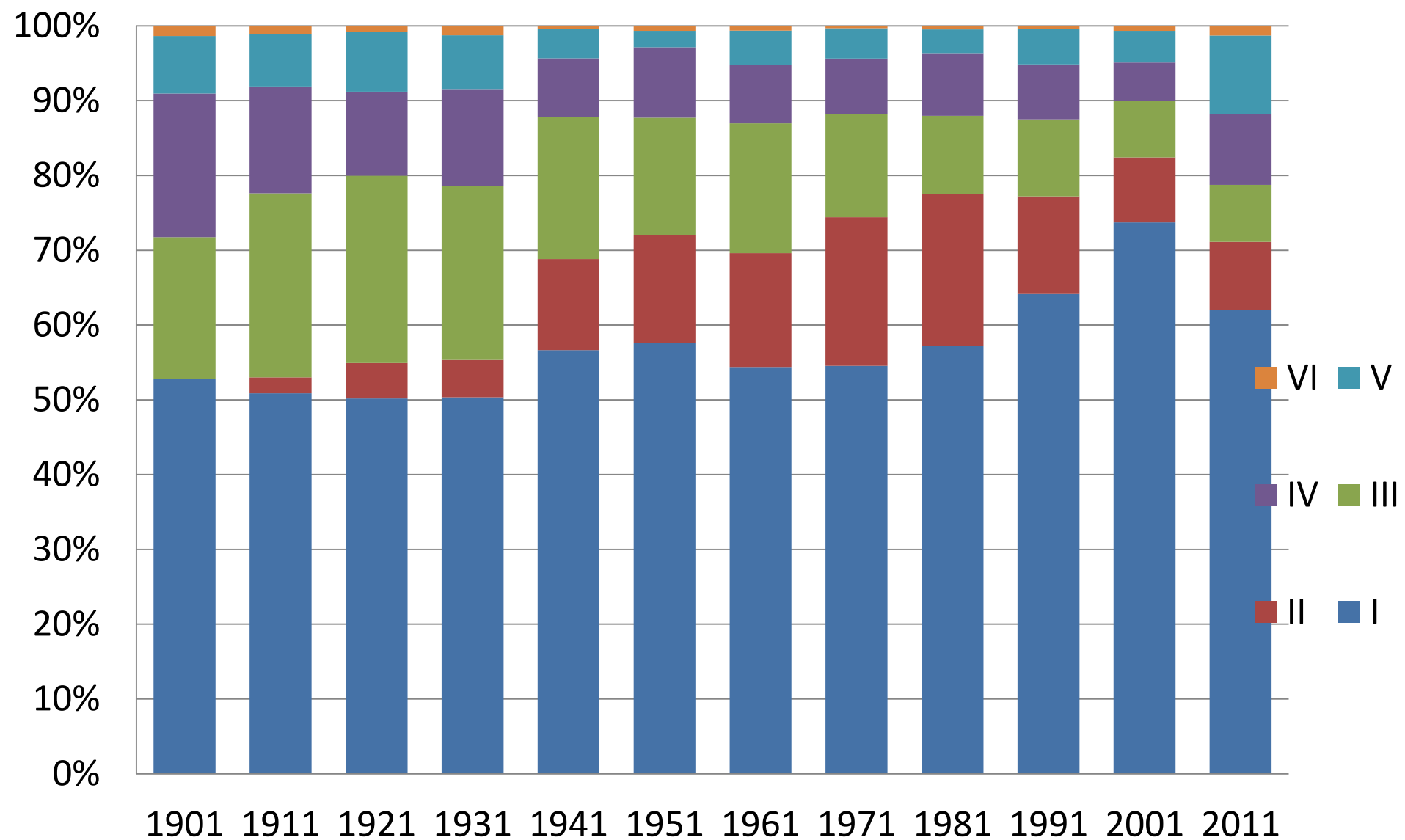
Europe	Africa	Less Developed Countries	World Average	Developed Countries	Asia	South Central Asia	India
7.5	9	15	15.5	16	18	23	23.5

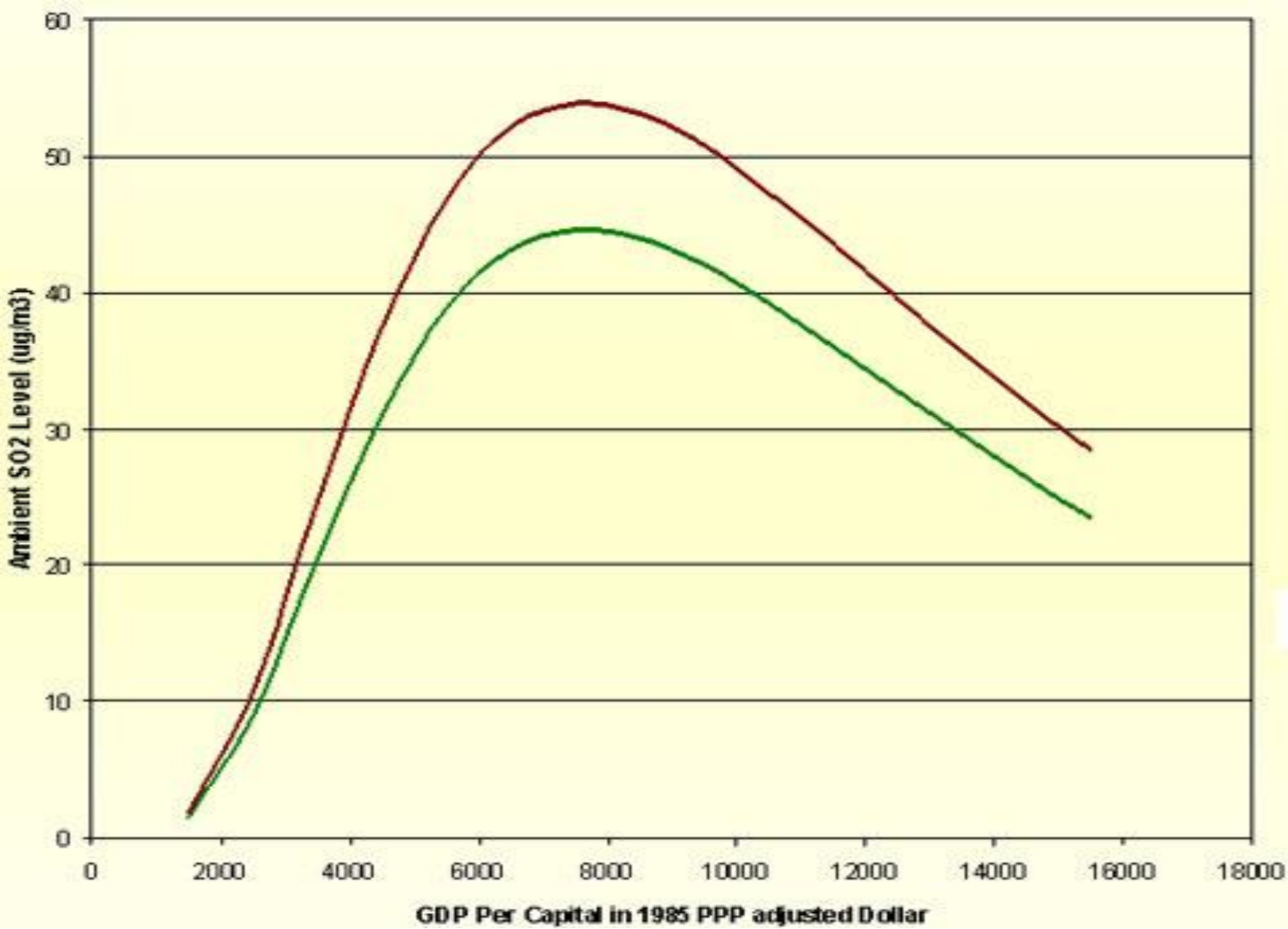
Implications of top heavy urban structure: high infrastructural cost, energy consumption, regional disparity and threat to sustainable development.

**Proportion of urban population in different size categories,
1901–2001**



Percentage of Urban Population in West Bengal in Different Size Classes 1901- 2011





COST COMPARISON OF ENERGY SOURCES 2018

Adapted from US DOE²

Power Plant Type	Cost \$/kW-hr
Coal with CCS	\$0.12-0.13
CC Natural Gas	\$0.05
CC with CCS	\$0.075
Nuclear	\$0.093
Wind onshore	\$0.059
Wind offshore	\$0.139
Solar PV	\$0.063
Solar Thermal	\$0.165
Geothermal	\$0.045
Biomass	\$0.095
Hydro	\$0.062



The End