

Health and Wellbeing

94th FC



What does it mean

- "Health is a resource for everyday life, not the objective of living; it is a positive concept, emphasizing social and personal resources, as well as physical capacities". WHO
- Health triangle

Current scenario: reports

Burden of disease study

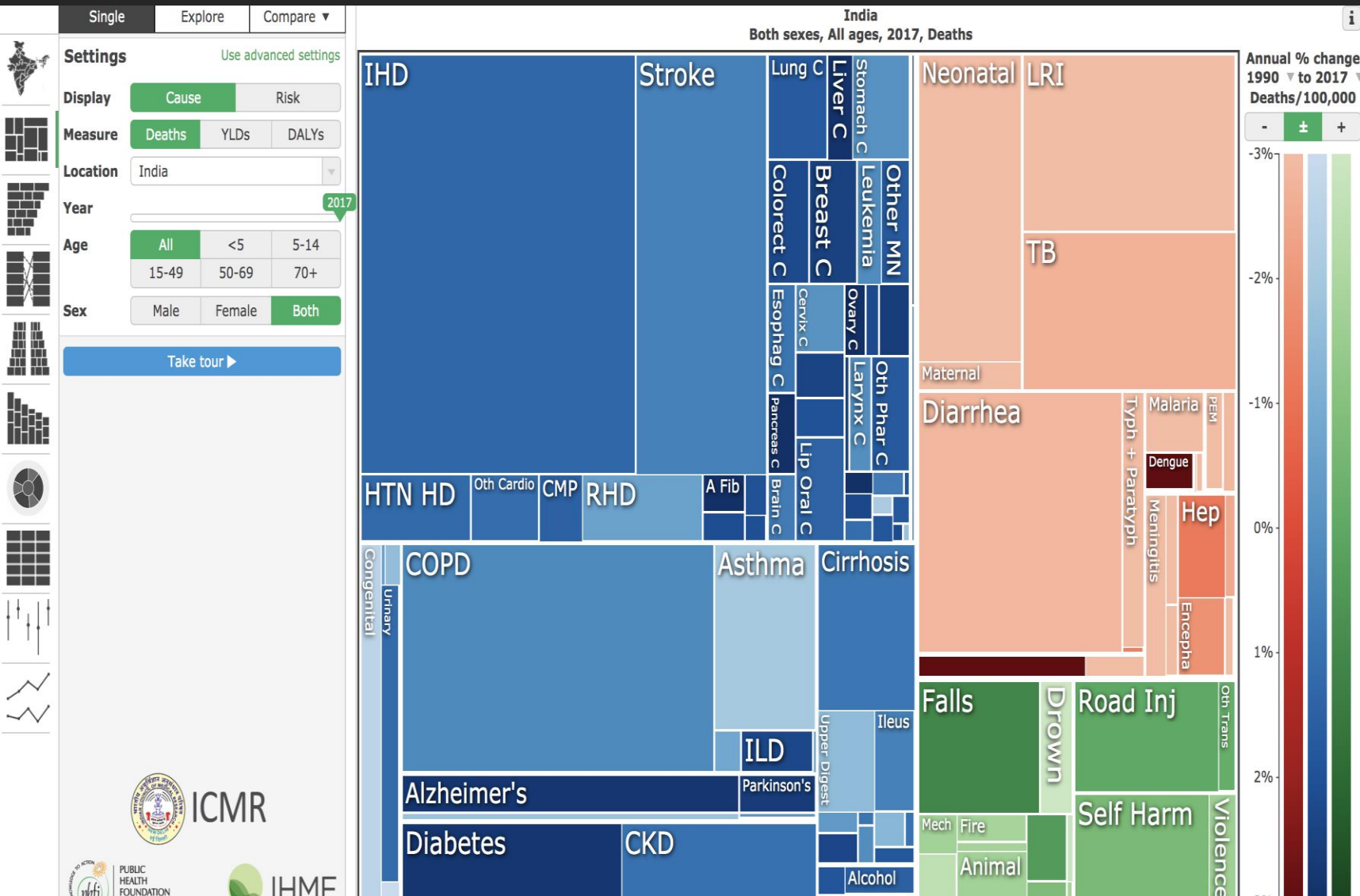
India: Health of the Nation's States

The India State-Level Disease Burden Initiative

INDIAN COUNCIL OF MEDICAL RESEARCH

PUBLIC HEALTH FOUNDATION OF INDIA

INSTITUTE FOR HEALTH METRICS AND EVALUATION



ICMR



Department of Health Research
Ministry of Health and Family Welfare
Government of India



PUBLIC HEALTH FOUNDATION OF INDIA



IHME



NFHS 4

India - Key Indicators

Indicators	NFHS-4 (2015-16)			NFHS-3 (2005-06)
	Urban	Rural	Total	Total
Population and Household Profile				
1. Population (female) age 6 years and above who ever attended school (%)	80.6	63.0	68.8	58.3
2. Population below age 15 years (%)	24.9	30.5	28.6	34.9
3. Sex ratio of the total population (females per 1,000 males)	956	1,009	991	1,000
4. Sex ratio at birth for children born in the last five years (females per 1,000 males)	899	927	919	914
5. Children under age 5 years whose birth was registered (%)	88.8	76.1	79.7	41.2
6. Households with electricity (%)	97.5	83.2	88.2	67.9
7. Households with an improved drinking-water source ¹ (%)	91.1	89.3	89.9	87.6
8. Households using improved sanitation facility ² (%)	70.3	36.7	48.4	29.1
9. Households using clean fuel for cooking ³ (%)	80.6	24.0	43.8	25.5
10. Households using iodized salt (%)	96.5	91.4	93.1	76.1
11. Households with any usual member covered by a health scheme or health insurance (%)	28.2	28.9	28.7	4.8
Characteristics of Adults (age 15-49)				
12. Women who are literate (%)	81.4	61.5	68.4	55.1
13. Men who are literate (%)	90.8	82.6	85.7	78.1
14. Women with 10 or more years of schooling (%)	51.5	27.3	35.7	22.3
Marriage and Fertility				
15. Women age 20-24 years married before age 18 years (%)	17.5	31.5	26.8	47.4
16. Men age 25-29 years married before age 21 years (%)	14.1	24.4	20.3	32.3
17. Total fertility rate (children per woman)	1.8	2.4	2.2	2.7
18. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)	5.0	9.2	7.9	16.0
Infant and Child Mortality Rates (per 1,000 live births)				
19. Infant mortality rate (IMR)	29	46	41	57
20. Under-five mortality rate (U5MR)	34	56	50	74
Current Use of Family Planning Methods (currently married women age 15-49 years)				
21. Any method ⁴ (%)	57.2	51.7	53.5	56.3
22. Any modern method ⁴ (%)	51.2	46.0	47.8	48.5
23. Female sterilization (%)	35.7	36.1	36.0	37.3
24. Male sterilization (%)	0.3	0.3	0.3	1.0
25. IUD/PPIUD (%)	2.4	1.1	1.5	1.7
26. Pill (%)	3.5	4.3	4.1	3.1
27. Condom (%)	9.1	3.9	5.6	5.2
Unmet Need for Family Planning (currently married women age 15-49 years)⁵				
28. Total unmet need (%)	12.1	13.2	12.9	13.9
29. Unmet need for spacing (%)	5.1	5.9	5.7	6.1
Quality of Family Planning Services				
30. Health worker ever talked to female non-users about family planning (%)	18.6	17.2	17.7	10.1
31. Current users ever told about side effects of current method ⁶ (%)	50.1	45.0	46.6	34.4

¹ Piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, community RO plant. ² Flush to

National Family Health Survey (NFHS-4)

2015-16



International Institute for Population Sciences
(Deemed University)
Mumbai

NITI Ayog strategy

1.2 CHILD UNDERNUTRITION

India is home to the largest number of children in the world. Nearly every fifth young child in the world lives in India. It is estimated that there are about 43 crore children in the age group of 0-18 years. Children and women together constitute around 70% of India's people – representing not just the

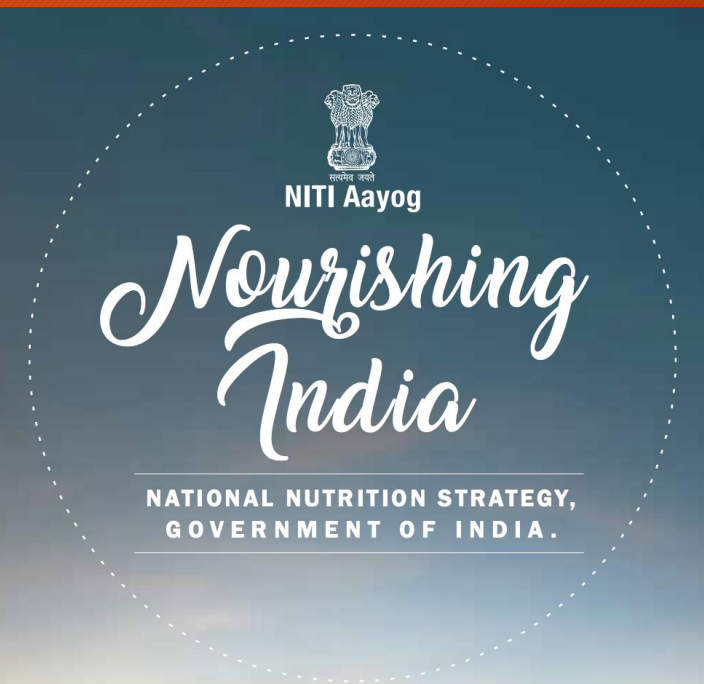


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National Nutrition Strategy

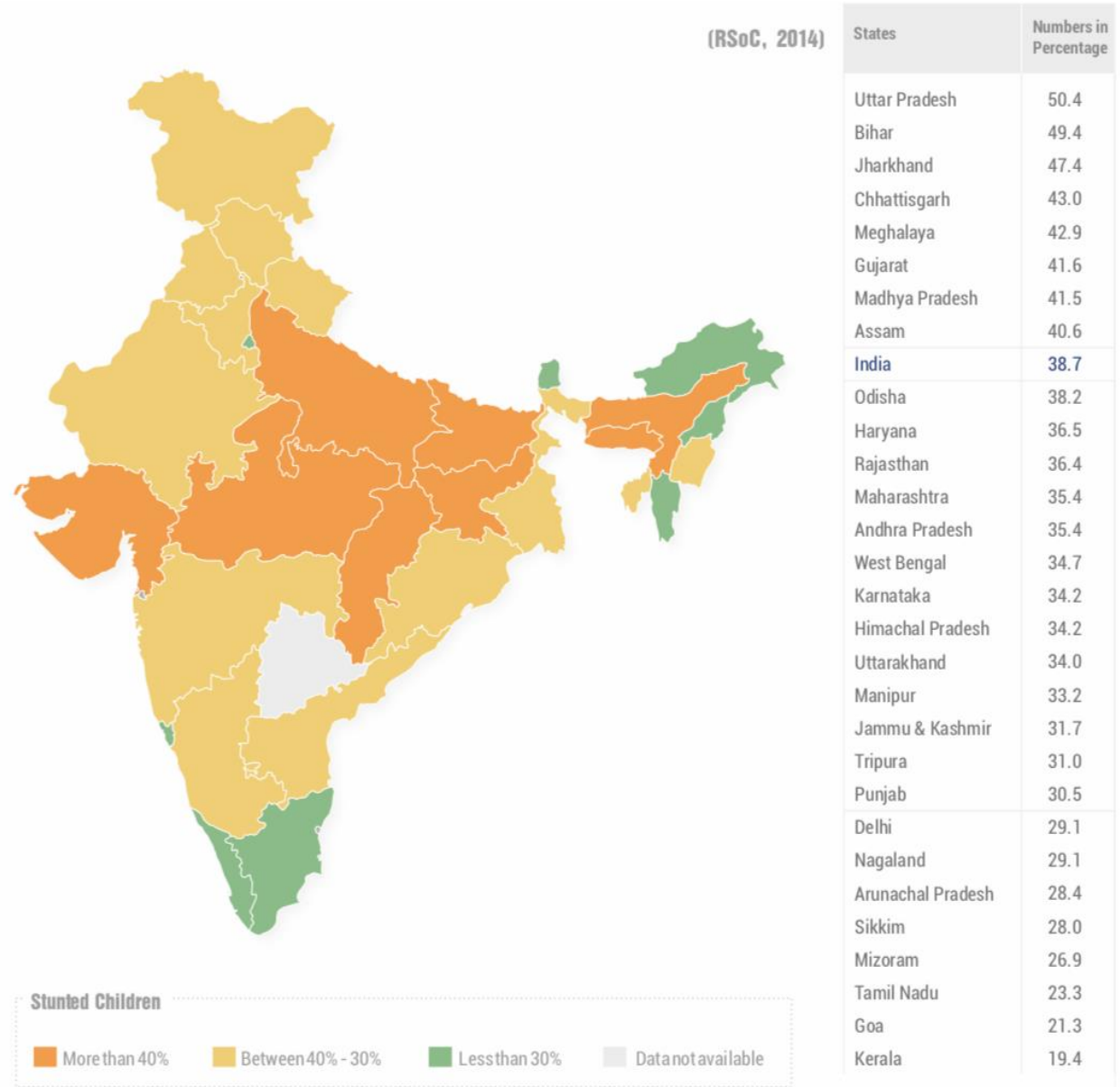
present human resource base – but also the future. This resource base is eroded by undernutrition - which undermines their survival, health, cumulative learning capacities and adult productivity and must be urgently addressed.

Child Undernutrition remains high, despite improvements over the last decade. Figure 1 compares the primary indicators of child undernutrition - stunting, wasting and underweight, for children below five years of age. As evident, while stunting and underweight prevalence has gone down, trends in wasting show an overall increase in the last decade. The decrease in stunting has been from 48% to 38.4%, that is, by 1 percentage point per year. Similarly, underweight prevalence has reduced by 0.68 percentage



IFPRI fact sheets

FIGURE 2 PREVALENCE OF STUNTING IN UNDER-5 CHILDREN, BY STATE



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POSHAN website

POSHAN (Partnerships and Opportunities to Strengthen and Harness Nutrition Evidence) in India aims to reduce the nutrition evidence gap in India by synthesizing, generating, and disseminating nutrition evidence. The goal of POSHAN is to enable policymakers, program implementers, researchers, and other stakeholders to readily access the latest, best evidence to improve maternal and child nutrition in India.

POSHAN is generously supported by the Bill & Melinda Gates Foundation, the International Food Policy Research Institute (IFPRI), in collaboration with the International Institute of Population and Family Studies (IIPF) and the Institute of Development Studies (IDS).

Global Nutrition Report, WHO country briefs

2018 Nutrition country profile | globalnutritionreport.org

India



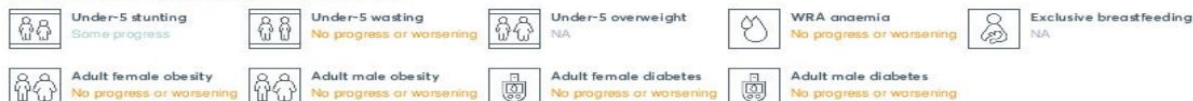
Overview

Burden classification

The Global Nutrition Report classifies this country as experiencing two forms of malnutrition – anaemia and stunting

Source: UNICEF/WHO/World Bank Group Joint child malnutrition estimates, NCD Risk Factor Collaboration, WHO Global Health Observatory.
Notes: Thresholds for a country having the form or not: stunting in children aged under 5 years $\geq 20\%$; anaemia in women of reproductive age $\geq 20\%$; overweight (body mass index ≥ 25) in adult women aged ≥ 18 years $\geq 35\%$.

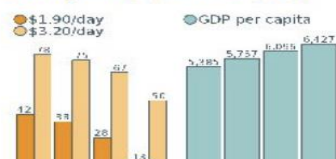
Progress against global nutrition targets 2018



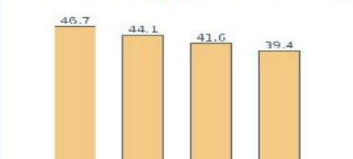
Source: UNICEF/WHO/World Bank Group Joint child malnutrition estimates, UNICEF global databases: Infant and Young Child Feeding, NCD Risk Factor Collaboration, WHO Global Health Observatory.
Notes: The methodologies for tracking differ between targets. Data on the adult indicators are based on modelled estimates. See Appendix 1 of the 2018 Global Nutrition Report for details of the methods and sources used to assess progress towards global nutrition targets.

Economics and demography

Poverty rates (%) and GDP (PPP\$)



Under-5 mortality (per 1000 live births)



Income inequality

Gini index score ¹	Gini index rank ²	Year
35	58	2011

Source: World Bank 2018.
Notes: 0 = perfect equality, 100 = perfect inequality. Countries are ranked from most equal (1) to most unequal (155).²

Population

Population (000)	1,339,180	2017
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India country nutrition profile

Country profiles aggregate the very latest data on child, adolescent and adult anthropometry and nutritional status, as well as intervention coverage, food supply, nutrition spending and demography.

Country Selected

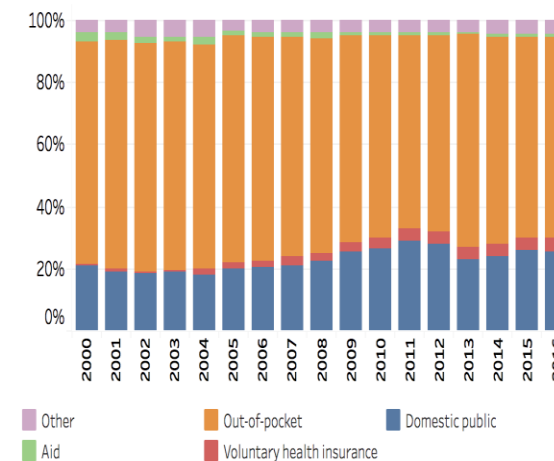
India



Health Expenditure Profile India

	Year			
	2000	2005	2010	2016
GDP per capita US\$	700	894	1,239	1,714
CHE per capita US\$	28	34	41	63
GGHED%CHE	21%	20%	26%	25%
GGHED%GDP	0.8%	0.8%	0.9%	0.9%
OOPS%CHE	72%	73%	65%	65%
GGE%GDP	25%	25%	27%	30%
GGHED%GGE	3%	3%	3%	3%
Population	1,053,050,880	1,144,118,656	1,230,980,736	1,324,171,392

Current Health Expenditure (By Revenue Sources)



How health and well being is poised for a change

- Early diagnosis
- Medical research and drug discovery
- Workflow management
- Telehealth
- Blockchain
- VR/ MR
- Robotic care
- 3D printing

Focus areas for AI intervention

Sectoral deep dives

Healthcare

Healthcare is one of the most dynamic, yet challenging, sectors in India, and is expected to grow to USD280 billion by 2020, at a CAGR of upwards of 16%, from the current ~USD100 billion⁹.

Yet, it faces major challenges of quality, accessibility and affordability for a large section of the population:

- a) *Shortage of qualified healthcare professionals and services like qualified doctors, nurses, technicians and infrastructure:* as evidenced in 0.76 doctors and 2.09 nurses per 1,000 population (as compared to WHO recommendations of 1 doctor and 2.5 nurses per 1,000 population respectively) and 1.3 hospital beds per 1,000 population as compared to WHO recommended 3.5 hospital beds per 1,000 population¹⁰.
- b) *Non-uniform accessibility to healthcare across the country with physical access* continuing to be the major barrier to both preventive and curative health services, and glaring disparity between rural and urban India.

Figure 7: Accessibility of Healthcare across India

Split of population and doctors



Share of cases treated



How will it impact governance across civil services ?

- Reconcile : Poverty, malnutrition, disease with high tech
- Public health-surveillance, mapping
- Self monitoring and health care through wearables, Smartphone selfies as diagnostic tools
- Expanding access in underserved regions
- Jobs
- Life spans- demographics
- Ethics of machines
- Doctor patient relationships and placebos

Which sub topics? Volunteers ?
.....eventually, a systems way of looking

- Some suggestions:
- Malnutrition- building block of well being
- Supply side changes- health care professionals
- Emerging challenges
- Paradox of Non communicable diseases with poverty



thank you!

LET'S GET STARTED!

