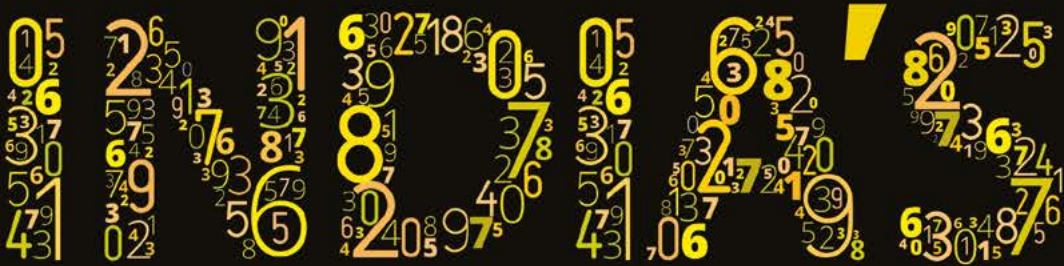


A **DownToEarth** ANNUAL



2 0 1 7

IN FIGURES

Editorial and research directions: Sunita Narain and Richard Mahapatra

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Web Design: Rajendra Rawat

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ISBN: 978-81-86906-04-0

Price: ₹ 150 (US \$10)

Material from this publication can be used, but with acknowledgement.


Maps in this report are indicative and not to scale.

Published by
Centre for Science and Environment
41, Tughlakabad Institutional Area
New Delhi 110 062
Phones: 91-11-40616000
Fax: 91-11-29955879
E-mail: cse@cseindia.org
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NEW IN THIS YEAR'S SOE IN FIGURES

REFERENCES
Each section has a reference page which gives additional resources and gives sneak-peek into what the last year's SoE had on the topic

ONLINE RESOURCE
All the data used in the chapter have a source box that is hyperlinked to an online resource (see below) from where you can download the raw data



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2017 saw the warmest winters ever

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1,500 people died due to extreme weather events in 2016

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Farmers in 60 per cent rural districts vulnerable to climate change

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5,156 cases registered in 2014 and 2015

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One in every five Indian is obese

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Smaller cities are the most polluted

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Emissions from crop burning in India is 17 times higher than Delhi's pollution

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96 per cent upcoming plants unlikely to meet new emission norms

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98 per cent workforce unskilled

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55 per cent wages delayed in 2016-17

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One in every three Indians is a migrant

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DATAFIED

RICHARD MAHAPATRA
Managing Editor, *Down To Earth*

Data is both the new language and script. Starting from researchers to retailers, from weather scientists to taxi operators, from journalists to book publishers, everybody wants to possess and process big data to communicate effectively and precisely. In a world where hand-held devices like the smart phone are the common platform to communicate, data is naturally the way to do so. Because, data is always precise and definitive.

But as the new idiom of communication takes over, there is the usual concern over credibility. Like never before, we have an increasing volume of data hitting us with a higher velocity and in a wider variety. Which data is credible? That is going to be the most challenging aspect of the “datafied” world. While we might have easy access to huge data, without the credibility, we may end up using wrong data and for the wrong reasons.

The State of India's Environment 2017: In Figures is an attempt to equip you with this critical knowledge to survive in the new world. As the name suggests, it is a compilation of data on India's environment. But it simply doesn't give out data aggregated in random ways. Rather, it processes huge data generated through the year and puts them in the right context. All data used here comes with the right message, takes you much beyond the data itself and ultimately arms you with what you need the most: the meaning of the data.

The annual report is a well thought out interactive world of information. First, the chapters have been selected keeping in mind the environmental developments that have been raging in public conscience in recent times or will be the issues we all will deal in the near future. Second, each data set takes you to a wider portal of information. Thus, not just giving you an information on face, but taking you to the original set of data. This will help you to further process information according to your own context and uses. That way, this report links you to more than 40,000 articles, reports and hundreds of other data sets. Third, being backed by the data driven research and advocacy of Centre for Science and Environment (CSE) and *Down To Earth* magazine's reportage and research, the report comes with huge credibility. For every data that has been featured, there is a five-layer check to every aspect of it. Fourth, the report has featured data in such a way that one can make sense of it. For example, on the development index, India has been compared with other countries. Similarly, for every data set, we have featured its background and how things have moved in the past few years. You will also find references to relevant data from the last year's report.

We hope that the publication not just adds value to your own work but also to your understanding of India's environment. For any feedback and suggestions, do write back to us. ■

STATE OF DEVELOPMENT

INDIA V WORLD

The recently released Human Development Report, which complements the Sustainable Development Goals (SDG), ranks the country at a worrying 131 out of 193 UN member nations. This suggests that the country's economic growth has not been inclusive

Off the mark

India comes third among the eight SAARC nations



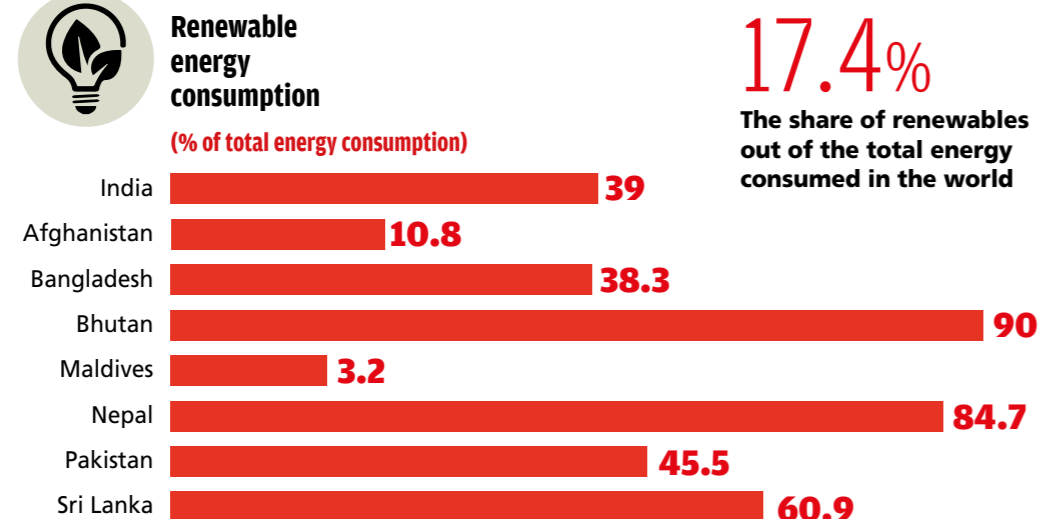
Human Development Report, 2016, United Nations Development Programme

ENVIRONMENTAL SUSTAINABILITY



Renewable energy consumption

(% of total energy consumption)



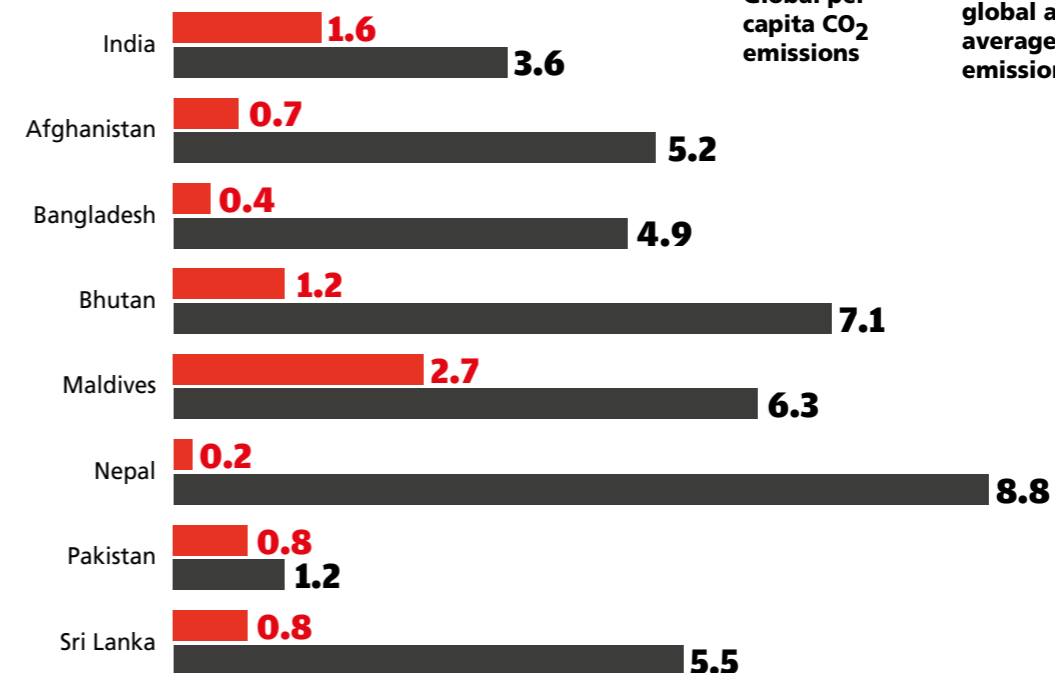
17.4%

The share of renewables out of the total energy consumed in the world



Carbon dioxide (CO₂) emissions

■ Per capita (tonnes) ■ Average annual change (%)



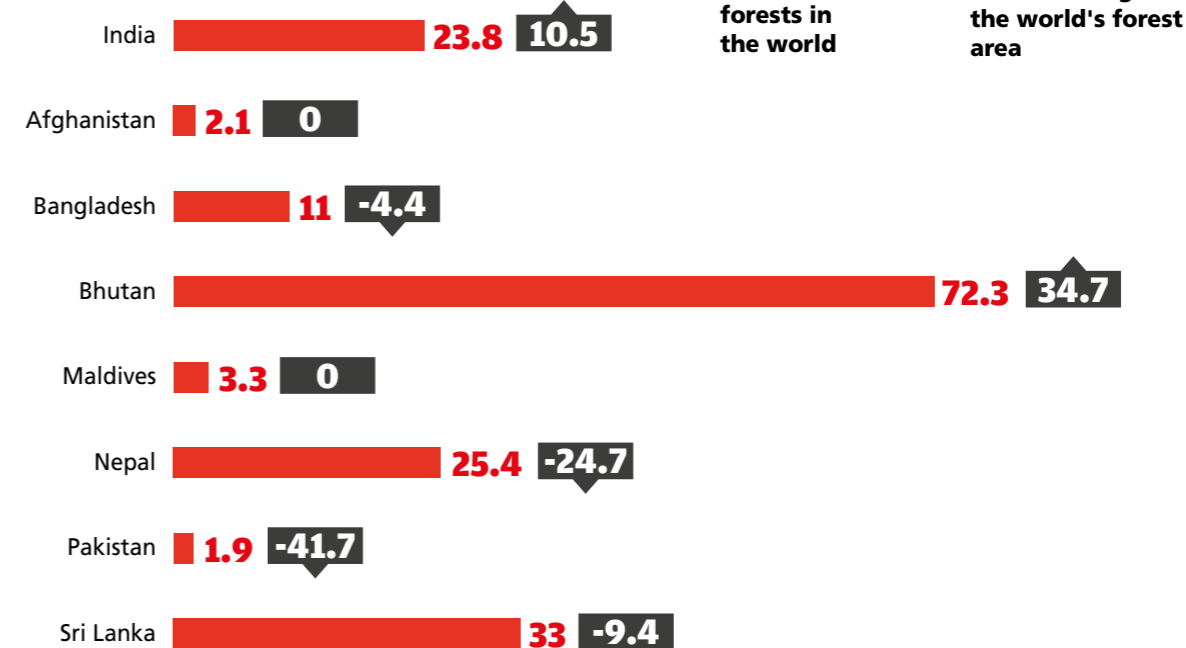
4.7
Global per capita CO₂ emissions

There has been no change in the global annual average of CO₂ emissions



Forest Area

■ % of total land area ■ Change (%)



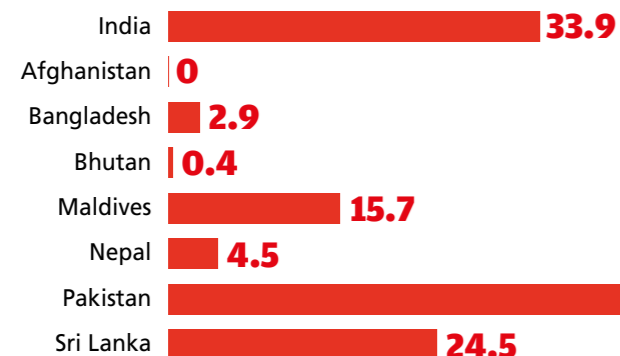
30.8%
The share of forests in the world

-3.2%
Annual change in the world's forest area



Freshwater withdrawals

(% of total renewable water resources)



6.9%

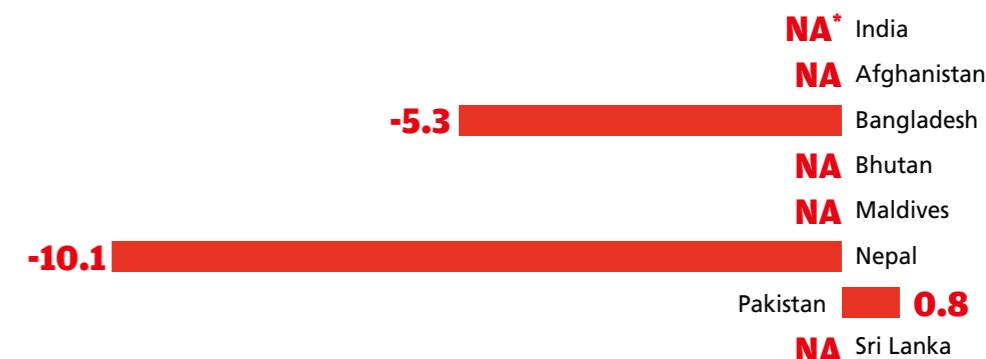
Total fresh water withdrawn in the world, expressed as the share of total renewable water resources



Population in multi-dimensional poverty

Average annual change (%)

Change in the percentage of the population in multidimensional poverty over 2005–2014, divided by respective number of years



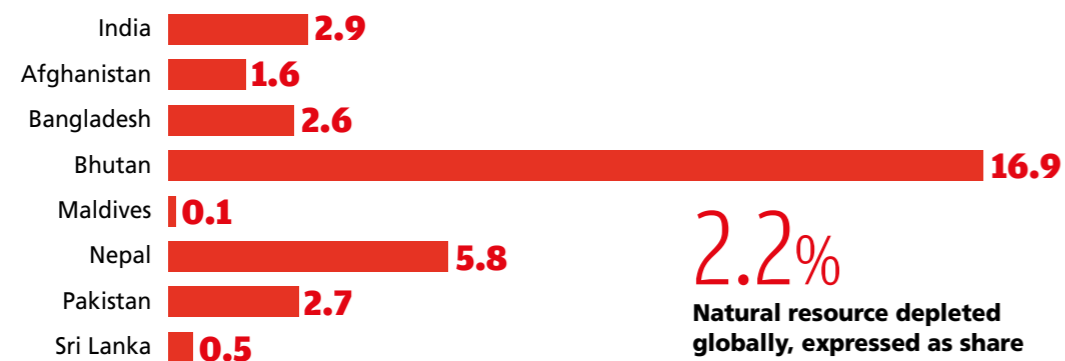
ECONOMIC SUSTAINABILITY



Natural resource depletion

Monetary expression of energy, mineral and forest depletion, expressed as a percentage of gross national income, which is the total domestic and foreign output claimed by residents of a country, minus income earned in the domestic economy by non-residents

(% of gross national income)



2.2%

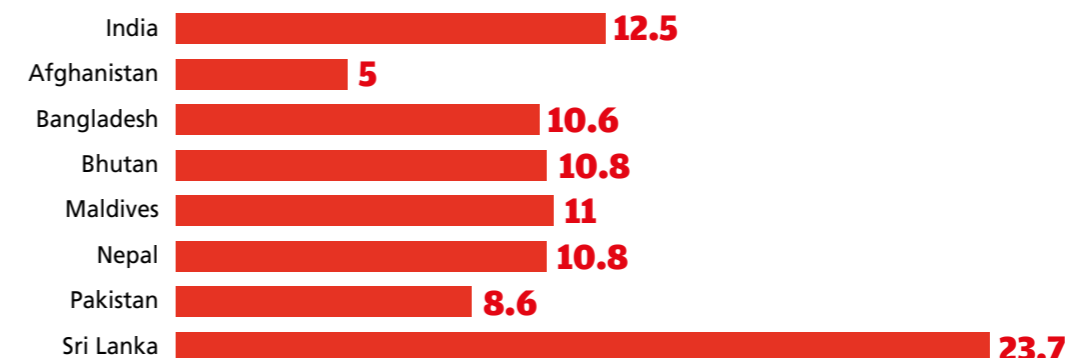
Natural resource depleted globally, expressed as share of gross national income



Old age dependency ratio

Per 100 people ages 15-64

Projected ratio of the population ages 65 and older to the population ages 15–64, expressed as the number of dependants per 100 people of working age (ages 15–64)



* Not available; Global figures are unavailable for social sustainability indicators
All the indicators have been taken from the Human Development Report, 2016, United Nations Development Programme

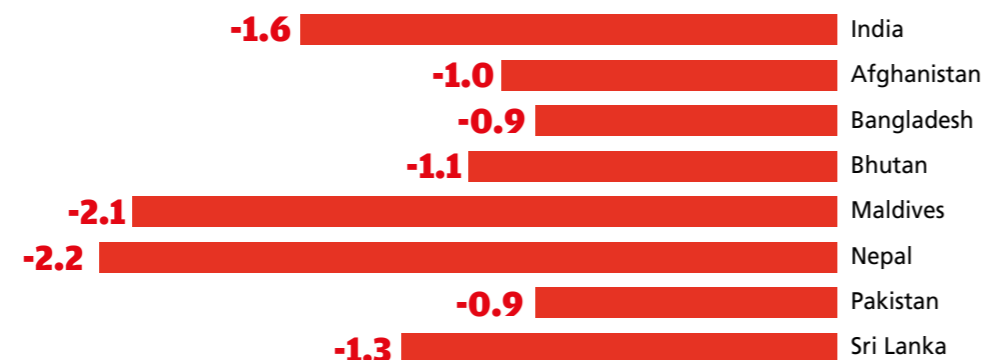
SOCIAL SUSTAINABILITY



Gender inequality index

A composite measure reflecting inequality in achievement between women and men in three dimensions: reproductive health, empowerment and the labour market. Higher GII values indicate higher inequalities and thus higher loss to human development

(Average annual change in %)



STATE OF DEVELOPMENT

SUSTAINABLE DEVELOPMENT GOALS

India missed most of the Millennium Development Goals (MDGs). And going by the current level of preparedness, the story is unlikely to be much different with the Sustainable Development Goals (SDGs), which replaced the MDGs from 2016. The recent 'SDG Index & dashboards: A global report' that evaluates the likelihood of various countries to achieve SDGs shows India is likely to miss even basic targets of poverty eradication, sanitation and clean air. There were three major reasons India missed MDGs. Firstly, it did not have the relevant indicators to measure the outcomes. For example, the Central Pollution Control Board, the nodal agency which monitors pollution levels, does not maintain pan-India levels of PM2.5, which is one of the deadliest forms of pollutant. Secondly, most agencies implementing social schemes did not have latest/relevant data. Just imagine, for some of the goals, no data is available after Census 2011. Finally, sustained investment in the social sector was a major hurdle. Conservative estimate suggest that the country will need at least US\$14.4 billion to meet SDGs by 2030. If India is serious about achieving SDGs, it must learn from the mistakes it committed in implementing MDGs

SDG Index report Only the small developed countries are in a position to meet SDGs by 2030

110

India's rank on the Sustainable Development Index

TOP 5

Sweden (1), Denmark (2), Norway (3), Finland (4), Switzerland (5)








Bottom 5

Chad (145), Niger (146), Congo (147), Liberia (148), Central African Republic (149)

Rankings given in brackets 'SDG Index & dashboards: A global report', published in July 2016 by the Sustainable Development Solutions Network and Bertelsmann Stiftung

IS INDIA PREPARED FOR THE SDGs?

The minimum and maximum value columns show the scores given to the best and the worst country in the category and the India value shows where the country stands. The numbers in red show the categories where India is worse than the global average and the numbers in green show where it is performing better than the global average

Indicator	India value	Min value	Max value
 Goal 1: No poverty			
Poverty headcount ratio at \$1.90 a day (%)	21.3	0	81.76
 Goal 2: Zero hunger			
Prevalence of undernourishment (%)	15.2	1.17	53.4
Cereal yield (tonne per hectare)	3	0.04	11.54
Prevalence of stunting, under-5 years (%)	38.7	0	57.7
Prevalence of wasting, under-5 years (%)	15.1	0	22.7
 Goal 3: Good health and well-being			
Under 5 mortality (per 1,000 live births)	47.7	1.9	156.9
Maternal mortality (per 100,000 live births)	174	0	1360
Neonatal mortality (per 1,000 live births)	27.7	0	48.7
Physician density (per 1,000 people)	0.7	0.01	7.74
Incidence of tuberculosis (per 100,000)	167	0	852
Traffic deaths (per 100,000)	16.6	0	73.4
Healthy life expectancy at birth (years)	58	39	76
Infants who receive 8 WHO vaccines (%)	83	22	99
 Goal 4: Quality education			
Expected years of schooling (years)	11.7	4.1	20.22
Literacy rate of 15-24 year olds (%)	81.1	23.52	100
Net primary school enrollment rate (%)	93.1	37.69	100
 Goal 5: Gender equality			
Women in national parliaments (%)	12	0	63.8
Female years of schooling (% male)	49.8	22.61	134.2
Female labor force participation (% male)	34.7	14.9	103.76
Unmet demand for contraceptives (% in ages 15-49)	28	5.41	93.01
 Goal 6: Clean water and sanitation			
Access to improved water (%)	94.1	31.7	100
Access to improved sanitation (%)	39.6	6.7	100
Freshwater withdrawal (%)	33.9	0.01	2075
 Goal 7: Affordable and clean energy			
Access to electricity (%)	78.7	5.06	100
Access to non-solid fuels (%)	42.4	0	99.9
CO ₂ from fuels & electricity (MtCO ₂ /TWh)	1.6	0.08	6.11

	Goal 8: Decent work and economic growth			
	Unemployment rate (%)	3.5	0.24	53.93
	Child labor (%)	11.8	0	49
	Goal 9: Industry, information and infrastructure			
	R&D expenditures (% GDP)	0.8	0	4.04
	Quality of trade and transport related infrastructure (1-5)	2.9	1.5	4.32
	Quality of overall infrastructure (1-7)	4	2.1	6.47
	Mobile broadband subscriptions (per 100)	3.2	0	149.3
	Internet use (%)	18	0	98.16
	Goal 10: Reduced inequalities			
	Gini index (0-100)	33.9	24.9	65.77
	Goal 11: Sustainable cities and communities			
	PM2.5 in urban areas (µg/m3)	46.7	4.36	70.13
	Improved water source, piped (%)	53.8	3.48	100
	Goal 12: Responsible consumption and production			
	Wastewater treated (%)	10.5	0	100
	Municipal solid waste (kg/person/year)	0.3	0.09	14.4
	Goal 13: Climate action			
	CO ₂ emissions from energy (tCO ₂ /capita)	1.7	0.02	44.02
	Climate change vulnerability (0-1)	0.3	0.01	0.43
	Goal 14: Life below water			
	Ocean Health Index - Clean waters (0-100)	51.3	34.74	93.92
	Ocean Health Index - Biodiversity (0-100)	85.6	64.67	98.26
	Ocean Health Index - Fisheries (0-100)	49	1	98
	Marine sites, completely protected (%)	4.2	0	100
	Fish stocks overexploited or collapsed (%)	23.6	0.02	95.01
	Goal 15: Life on land			
	Red List Index of species survival (0-1)	0.7	0.4	0.99
	Annual change in forest area (%)	2.7	0	100.73
	Goal 16: Peace, justice and strong institutions			
	Homicides (per 100,000)	3.5	0	90.4
	Corruption Perception Index (0-100)	38	8	91
	Registered births (%)	83.6	2.3	100
	Government efficiency (1-7)	4	1.41	5.77
	Goal 17: Partnerships for the goals			
	Health, Education & R&D spending (% GDP)	8.6	2.56	25.12

UN adopted SDGs to end extreme poverty, fight inequality and injustice, and fix climate change by 2030. It is an extension of MDGs and has 17 goals. [“SDG Index & dashboards: A global report”, the Sustainable Development Solutions Network and Bertelsmann Stiftung, September 25, 2015](#)



From State of India's Environment in figures 2016

31.5% of world's extremely poor lives in India

25% of world's undernourished lives in India

20% of world under-five deaths happen in India

[Get your copy of SoE in Figures 2016](#)

MORE ON DEVELOPMENT

[Human Development Report 2016: human development for everyone](#)

United Nations Development Programme | March 2017

The report finds that although average human development improved significantly across all regions from 1990 to 2015, one in three people worldwide continue to live in low levels of human development, as measured by the Human Development Index

[The inclusive growth and development report 2017](#)

World Economic Forum | January 2017

The report presents a new global index, the Inclusive Development Index (IDI), providing a richer and more nuanced assessment of countries' level (and recent performance) of economic development than the conventional one based on GDP per capita alone

[The global gender gap report 2016](#)

World Economic Forum | Oct 2016

This report seeks to measure one important aspect of gender equality—the relative gaps between women and men across four key areas: health, education, economy and politics

[SDG Index and Dashboards: global report](#)

Sustainable Development Solutions Network (SDSN) | July 2016

This provides a report card for tracking SDG progress and ensuring accountability

[Atlas of Sustainable Development Goals 2017: from World Development Indicators](#)

World Bank | April 2017

This report uses maps, charts and analysis to illustrate trends, challenges and measurement issues related to each of the 17 Sustainable Development Goals

[World Development Indicators 2017](#)

World Bank | April 2017

This edition reflects two major structural changes to World Development Indicators: Poverty and shared prosperity

[Asia-Pacific Sustainable Development Goals Outlook](#)

Asian Development Bank | March 2017

This report examines each of the 17 SDGs and describes the outlook for achieving each one in the Asia-Pacific region

RELATED WEBSITES

[United Nations Development Programme](#)

[The World Bank](#)

[Human Development Indicators, India | United Nations Development Programme](#)

[Sustainable Development Goals | United Nations](#)

[Sustainable Development Knowledge Platform | United Nations](#)

STATE OF INDIAN STATES

Bihar, Assam and Uttar Pradesh are the three worst performing states on 11 socio-economic indicators

Poor Performance

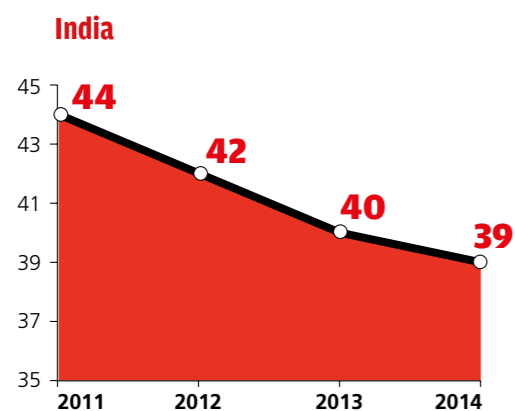
19 states consistently underperform in the 11 socio-economic indicators



States and Union Territories (UTs) have been ranked based on their performance on 11 socio-economic indicators. For this, we have analysed the performance of states under each indicator and awarded points to the three worst performers: Worst state: 3 points; 2nd worst: 2 points; 3rd worst: 1 point. Bihar got the maximum points, which means it fares worst on most parameters



INFANT MORTALITY (PER 1,000 LIVE BIRTHS)



8 States and UTs below the 2014 national average

Best performing states

Goa **10** | Manipur **11** | Kerala **12**

Worst performing states

Madhya Pradesh **52** | Assam **49** | Odisha **49**

Women & Men in India-2016, Ministry of Statistics and Programme Implementation, February 2017



MATERNAL MORTALITY (PER 100,000 LIVE BIRTHS)

India



6* States and UTs worse than the national average in 2011-13

Best performing states

Kerala **61** | Maharashtra **68** | Tamil Nadu **79**

Worst performing states

Assam **300** | Uttar Pradesh **285** | Rajasthan **244**

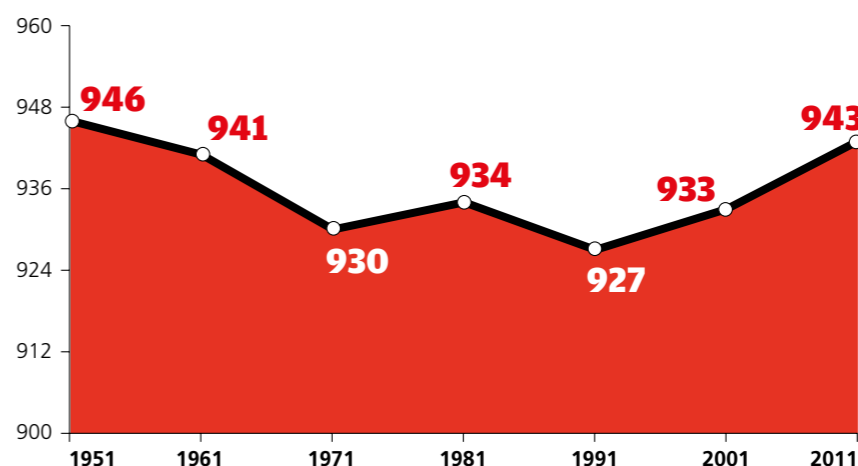
* Centre releases maternal mortality rate for only 15 major states, along with a combined average for the other states. It also clubs Jharkhand with Bihar, Chhattisgarh with Madhya Pradesh and Uttarakhand with Uttar Pradesh
National Health Profile 2015, Central Bureau of Health Intelligence, Ministry of Health and Family Welfare



SEX RATIO (NUMBER OF FEMALES PER 1,000 MALES)



India (



17 States and UTs below the 2011 national average

Best performing states

Kerala **1,084** | Puducherry **1,037** | Tamil Nadu **996**

Worst performing states

Daman & Diu **618** | Dadra & Nagar Haveli **774** | Chandigarh **818**

Women & Men in India-2016, Ministry of Statistics and Programme Implementation, February 2017



CHILD SEX RATIO (NUMBER OF GIRLS (0-6 YEARS) PER 1,000 BOYS)

India



13 States and UTs below the 2011 national average

Best performing states

Arunachal 972 | Meghalaya 970 | Mizoram 970

Worst performing states

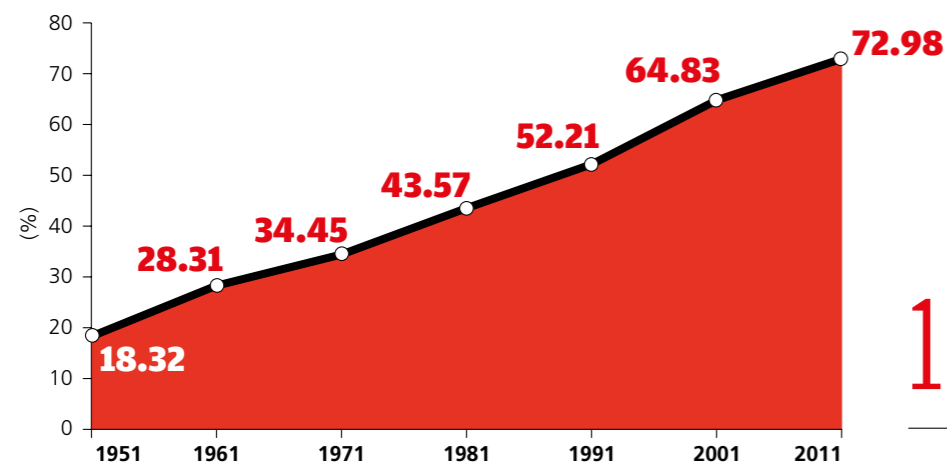
Haryana 834 | Punjab 846 | Jammu & Kashmir 862

Women & Men in India-2016, Ministry of Statistics and Programme Implementation, February 2017



LITERACY RATE

India (% of population seven years or above who can read and write)



11 States and UTs below the 2011 national average

Best performing states

Kerala 94% | Lakshadweep 91.8% | Mizoram 91.3%

Worst performing states

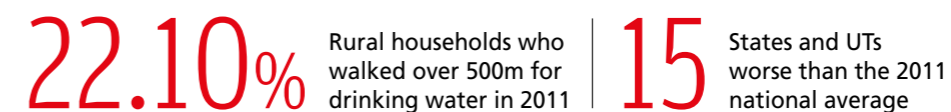
Bihar 61.8% | Arunachal 65.4% | Odisha 66.1%

Women & Men in India-2016, Ministry of Statistics and Programme Implementation, February 2017



HOUSEHOLDS WITHOUT ACCESS TO DRINKING WATER

India



Best performing states

Chandigarh 1.6% | Punjab 1.7% | Puducherry 2.1%

Worst performing states

Manipur 40.7% | Tripura 39.6% | Odisha 38.5%

Ministry of Drinking Water And Sanitation, March 30, 2017



HOUSEHOLDS WITH TREATED TAP WATER

India



Best performing states

Himachal Pradesh 84% | Puducherry 90% | Chandigarh 94%

Worst performing states

Bihar 3% | Nagaland 6% | Lakshadweep 9%

Households by Main Source of Drinking Water and Location, Census 2011



ACCESS TO TOILETS

India (% of rural households with toilets)



9 States and UTs below the 2016-17 national average

Best performing states

Himachal 100% | Kerala 100% | Sikkim 100% | Uttarakhand 100% | Chandigarh 96.73%

Worst performing states

Bihar 28.48% | Jammu & Kashmir 37.46% | Odisha 42.27%

Swachh Bharat Mission Gramin, figures as on May 10, 2017



SOURCE OF HOUSEHOLD LIGHTING

India

Rural households with electricity
1999-00 | 2011-12

48.4% | 72.7%

Urban households with electricity
1999-00 | 2011-12

89.1% | 96.1%

States that have most rural households with electricity:

Andhra Pradesh 97.6% | Punjab 97.4% | Tamil Nadu 96.9%

States that have least rural households with electricity:

Bihar 25.8% | Uttar Pradesh 40.4% | Assam 50%

States that have most urban households with electricity:

Maharashtra 98.9% | Tamil Nadu 98.8% | Karnataka 98.6%

States that have least urban households with electricity:

Bihar 81.2% | Uttar Pradesh 88.1% | Assam 89.7%

[Energy Sources of Indian Households for Cooking and Lighting, 2011-12, NSSO, 68th Round](#)



POVERTY

India

People below poverty line
(2011-12)

Rural: 21.9% | 25.7% | Urban: 13.6% | 9 States and UTs worse than the national average in 2011-12

Top 3 states with minimum people below poverty line:

Andaman & Nicobar 1% | Goa 5.1% | Kerala 7.1%

Bottom 3 states with maximum people below poverty line:

Chhattisgarh 39.9% | Dadra and Nagar 39.9% | Jharkhand 37%

[Women & Men in India-2016, Ministry of Statistics and Programme Implementation, February 2017](#)



PER CAPITA INCOME

India

₹93,293 Per capita net national product 2015-16

6 States/UTs worse than the national average

Best performing states (2015-16):

Delhi ₹280,142 | Chandigarh ₹242,386 | Sikkim ₹227,465

Worst performing states (2015-16):

Bihar ₹34,168 | Uttar Pradesh ₹48,520 | Jharkhand ₹62,816

Data unavailable for 16 states and UTs: Assam, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Kerala, Maharashtra, Manipur, Mizoram, Nagaland, Punjab, Rajasthan, Tripura, West Bengal

[Central Statistics Office, 2015-16](#)

MORE ON INDIAN STATES

[India Statistical Year Book, 2017](#)

Ministry of Statistics and Programme Implementation | 2017

The book provides both time series and cross sectional data covering various sectors. It includes all India time series data for over a decade and State level time series data for recent years

[Annual Report of Ministry of Statistics and Programme Implementation | 2016-17](#)

The annual report highlights achievements of the ministry during 2016-17

[Women and Men in India-2016](#)

Ministry of Statistics and Programme Implementation | March 2017

The publication focuses on portraying gender inequality, gender bias and gender discrimination through crucial statistical indicators of socio-economic relevance

[Energy sources of Indian households for cooking and lighting, 2011-12](#)

NSSO | July 2015

This report provides data on distributions of energy consumption separately for rural and urban sectors of each State/UT

[Economic Survey 2016-17](#)

Ministry Of Finance | Jan 2017

This annual survey reviews the developments in the Indian economy over the previous 12 months, summarizes the performance on major development programmes, and highlights the policy initiatives of the government and the prospects of the economy in the short to medium term

[Report of expert group to review the methodology for measurement of poverty \(Rangarajan Committee\)](#)

Planning Commission | June 2014

This report takes a look at the methods of the estimation of the poverty under C Rangarajan

[Report of expert group to review the methodology for estimation of poverty \(Tendulkar Committee\)](#)

Planning Commission | 2009

This report takes a look at the methods of the estimation of the poverty made by Suresh D Tendulkar

RELATED WEBSITES

[Central Statistical Office, Government of India](#)

[Niti Aayog, Government of India](#)

[Census of India](#)

[United Nations Development Programme](#)

STATE OF LEGISLATORS

SAANSAD ADARSH GRAM YOJANA

The scheme, launched by Prime Minister Narendra Modi on October 11, 2014, with much fanfare, is fast losing its sheen. Of the 791 Members of Parliament (MPs) from both Lok Sabha and Rajya Sabha, 704 had adopted villages in phase I, but in phase II, just 491 Parliamentarians have so far come forward to identify villages. In Uttar Pradesh (UP), of 111 MPs (both houses) just 46 have adopted villages. In Maharashtra, 38 of 67 MPs have so far identified villages for adoption.

One of the reasons MPs are shying away from identifying villages is because the scheme does not have dedicated budgetary allocations. MPs are expected to funnel money to adopted villages through the convergence of 21 ongoing schemes such as Indira Awaas Yojana for rural housing, Pradhan Mantri Gram Sadak Yojana, and Beti Bachao Beti Pado.

What is Saansad Adarsh Gram Yojana

The scheme aims at improving the standard of living in villages through holistic growth. An *adarsh gram* (ideal village) should evolve out of people's shared vision, using their capacities and available resources to the best extent possible, duly facilitated by the Member of Parliament, the Gram Panchayat, civil society and the government machinery.

Under the scheme, each Parliamentarian should develop one village by 2016 (phase I) and then identify two more to be developed by 2019. The scheme has entered its second phase, but only a handful of Parliamentarians have identified their villages so far

38%

MPs are yet to identify villages under the scheme

29

Union ministers have failed to identify villages

Ministry of Rural Development, Panchayati Raj, Drinking Water and Sanitation

MINISTERS WHO HAVE GIVEN THE SCHEME A MISS

35 per cent of Union ministers have not identified a village in phase II

CABINET MINISTERS



D V Sadananda Gowda
Minister of Statistics and Programme Implementation



Nitin Jairam Gadkari
Minister of Road Transport and Highways; and Minister of Shipping



Anant Geete
Minister of Heavy Industries and Public Enterprises



M Venkaiah Naidu
Urban Development, Housing and Urban Poverty Alleviation, Information and Broadcasting



Harsimrat Kaur Badal
Minister of Food Processing Industries



Ravi Shankar Prasad
Law & Justice, Electronics & Information Technology



Ananthkumar
Chemicals and Fertilizers, Parliamentary Affairs

MINISTERS OF STATE

Kiren Rijju	Ministry of Home Affairs
Rajen Gohain	Ministry of Railways
Uendra Kushwaha	Ministry of Human Resource Development
Giriraj Singh	Ministry of Micro, Small and Medium Enterprises
Jaswantsinh Sumanbhai Bhabhor	Ministry of Tribal Affairs
Haribhai Parthibhai Chaudhary	Ministry of Micro, Small and Medium Enterprises
Ramesh Chandappa Jigajinagi	Ministry of Drinking Water and Sanitation
Faggan Singh Kulaste	Ministry of Health and Family Welfare
Subhash Ramrao Bhamre	Ministry of Defence
Hansraj Gangaram Ahir	Ministry of Home Affairs
Vijay Sampla	Ministry of Social Justice and Empowerment
Ramdas Athawale	Ministry of Social Justice and Empowerment
Rajen Gohain	Ministry of Railways
M J Akbar	Ministry of External Affairs
Anupriya Patel	Ministry of Health and Family Welfare
Ajay Tamta	Ministry of Textiles
S S Ahluwalia	Ministry of Agriculture and Farmers Welfare; and Ministry of Parliamentary Affairs
Uendra Kushwaha	Ministry of Human Resources Development

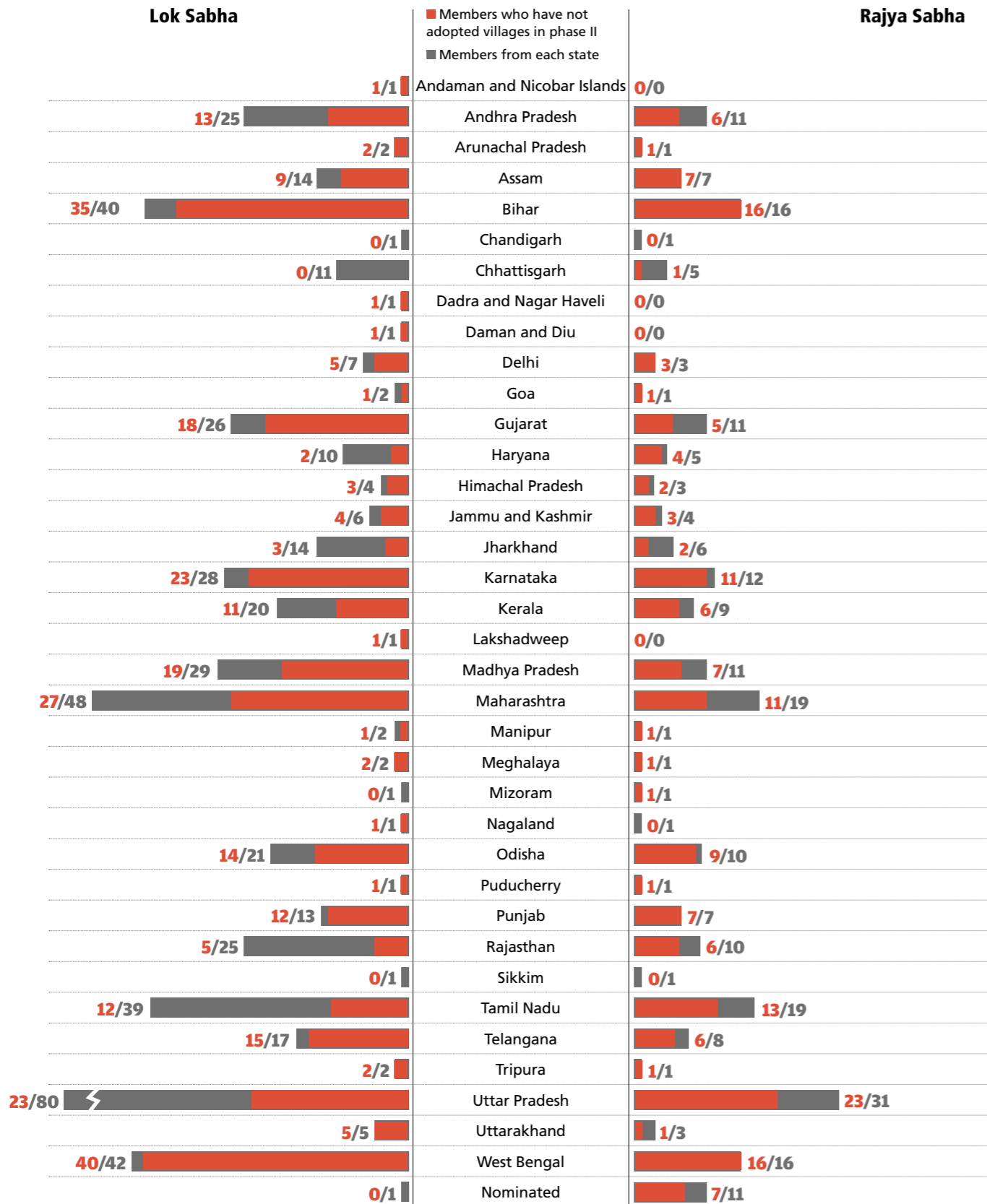
MINISTERS OF STATE (INDEPENDENT CHARGE)

Rajiv Pratap Rudy	Ministry of Skill Development and Entrepreneurship
Shripad Yesso Naik	Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH)
Dharmendra Pradhan	Ministry of Petroleum and Natural Gas
Mukhtar Abbas Naqvi	Ministry of Parliamentary Affairs

Ministry of Rural Development, Panchayati Raj, Drinking Water and Sanitation; Updated till May 12, 2017

NOT SO IMPORTANT FOR OUR PARLIAMENTARIANS

Lok Sabha members from 27 states and Rajya Sabha members from 21 states have not identified their villages in phase II



Ministry of Rural Development, Panchayati Raj, Drinking Water and Sanitation; Updated till May 12, 2017

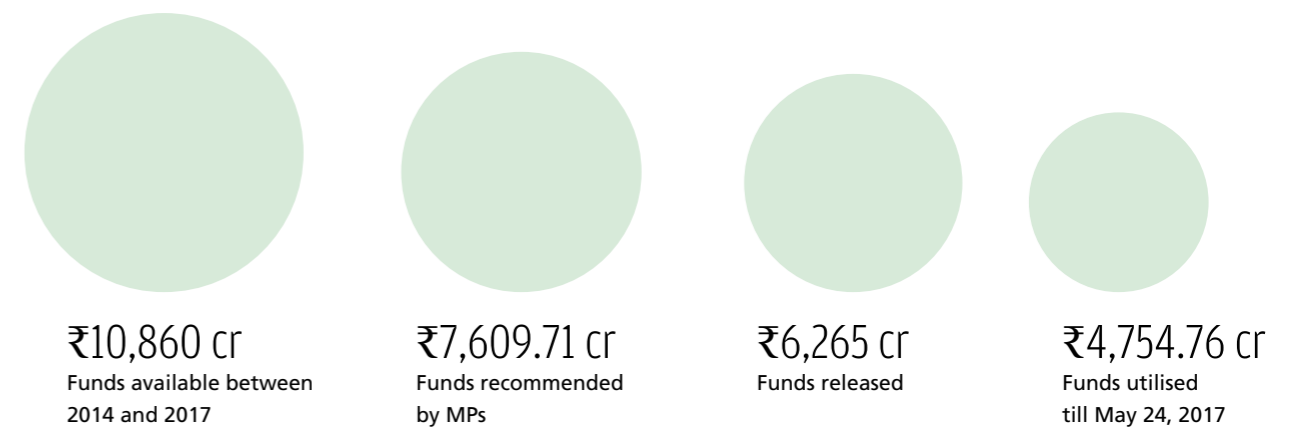
STATE OF LEGISLATORS

MPLAD SCHEME

Just 50% funds have been utilised

In February 2015, Lok Sabha committee on Member of Parliament Local Area Development (MPLAD) requested for a five-fold increase in the annual allocation from ₹5 crore to ₹25 crore. Under the scheme, each Parliamentarian has the choice to suggest to the district collector for works to be taken up in his/her constituency. The demand was raised despite the fact that close to 60 per cent of the total funds allocated under the scheme remained unspent since 2014. What is even worrying is that 17 Cabinet ministers from the Lok Sabha had failed to spend close to 45 per cent of their funds. The performance of the parliamentarians from the Union Territories has been the poorest as they have managed to spend only 31 per cent of the allocated funds. The performance of the parliamentarians from states was marginally better at 44 per cent. The MPLAD committee's demand was rejected by the Union Finance Minister Arun Jaitley in July 2016.

Too much to handle



Ministry of Statistics and Programme Implementation, Government of India, May 24, 2017

Slowing down | How effective has been the scheme

STEP 1

A Lok Sabha MP gives his choice of Nodal District to the Ministry of Statistics and Programme Implementation and sends a copy to the state government and to the District Magistrate. The Rajya Sabha MP can choose any district in his/her state of election as Nodal District. Nominated Members of Rajya Sabha and Lok Sabha can choose any district in the country as Nodal District

STEP 2

Each MP will recommend works up to the annual entitlement during the financial year to the concerned District Authority (DA), which gets the projects sanctioned as per state government procedures

**% of funds recommended by MPs
In states**
69.89

In UTs
85.45

STEP 3

The Union ministry releases the funds to DA and informs the State Nodal Department about the same

**% of funds released
For states**
57.82

For UTs
45.83

STEP 4

DA implements the schemes and sends status reports to the Union ministry and the State Nodal Department


















**% of funds spent by DA
In states**
43.89

In UTs
30.78

CABINET MINISTERS WITH POOR MPLAD PERFORMANCE

While none of the ministers could spend the entire amount, the prime minister's performance was a dismal 52.86 per cent

The period of analysis is 2014-17 and each minister was eligible to spend ₹20 crore in the four years

	Recommended by MPs (in ₹ cr)	Released by the Centre (in ₹ cr)	Spent by DA (in ₹ cr)	% spent
 Harsh Vardhan	12.37	5	2.38	15.86
 Ananthkumar	7.15	7.5	2.03	13.53
 Radha Mohan Singh	7.98	5	4.9	32.66
 Narendra Singh Tomar	7.2	7.5	4.37	29.13
 Uma Bharati	7.32	7.5	6.43	42.86
 Raj Nath Singh	9.98	12.5	8.44	56.26
 Jual Oram	21.17	15	10.7	71.33
 D V Sadananda Gowda	9.8	10	5.66	37.7
 Kalraj Mishra	8.47	12.5	7.82	52.13
 Narendra Modi	11.24	12	7.93	52.86
 Anant Geete	16.9	12.5	10.69	71.26
 Ashok Gajapathi Raju Pusapati	13.26	12.5	11.19	74.6
 Maneka Sanjay Gandhi	12.36	15	10.74	71.6
 Harsimrat Kaur Badal	16.66	15	11.95	79.66
 Nitin Jairam Gadkari	19.64	15	10.99	73.26
 Ramvilas Paswan	38.59	15	13.02	86.8
 Sushma Swaraj	15.31	17.5	13.7	91.33

Ministry of Statistics and Programme Implementation; List updated till May 24, 2017 and excludes the 10 Cabinet ministers from Rajya Sabha

MISSING OUT BY A LOT

Parliamentarians from 26 states and all the Union Territories have spent less than 50 per cent of their funds

	Total amount available to MPs (in ₹ cr)	Amount recommended by MPs (in ₹ cr)	Amount released by the Centre (in ₹ cr)	Amount spent by DA (in ₹ cr)	% spent
States					
DELHI	140	106.2	42.5	25.27	18.05
JAMMU AND KASHMIR	500	334.01	250	192.82	38.56
TRIPURA	40	24.91	27.5	21.99	54.98
KARNATAKA	280	136.9	160	117.7	42.04
RAJASTHAN	800	621.87	392.5	356.82	44.60
UTTARAKHAND	40	23.61	15	13.18	32.95
GOA	520	405.87	315	259.39	49.88
MAHARASHTRA	200	163.69	120	81.9	40.95
HARYANA	80	56.7	60	53.53	66.91
JHARKHAND	120	65.32	55	42.87	35.73
BIHAR	560	300.99	287.5	187.9	33.55
UTTAR PRADESH	400	417.84	237.5	179.8	44.95
ANDHRA PRADESH	580	397.8	397.5	292.26	50.39
ODISHA	960	885.1	505	367.57	38.29
ASSAM	40	23.87	27.5	21.28	53.20
KERALA	40	29.23	30	24.03	60.08
SIKKIM	20	12.36	15	11.92	59.60
TELANGANA	20	15	15	12.57	62.85
WEST BENGAL	420	306.09	252.5	175.79	41.85
GUJARAT	260	182.1	177.5	136.83	52.63
TAMIL NADU	500	277.92	277.5	182.73	36.55
MADHYA PRADESH	20	13.76	12.5	12.68	63.40
CHHATTISGARH	780	568.32	515	434.87	55.75
PUNJAB	40	16.43	32.5	10.93	27.33
NAGALAND	1600	838.39	915	654.51	40.91
ARUNACHAL PRADESH	840	640.31	550	421.96	50.23
MIZORAM	220	212.33	152.5	134.1	60.95
MEGHALAYA	100	40.12	50	29.32	29.32
MANIPUR	280	153.06	150	112.42	40.15
HIMACHAL PRADESH	340	237.06	172.5	145.88	42.91
TOTAL	10740	7507.16	6210	4714.82	43.90
Union Territories					
DADAR & NAGAR	20	16.8	7.5	5.04	25.2
ANDAMAN & NICOBAR ISLAND	20	9.28	10	7.36	36.8
DAMAN & DIU	20	19.04	7.5	4.88	24.4
CHANDIGARH	20	5.35	7.5	2.76	13.8
LAKSHADWEEP	20	31.74	10	7.35	36.75
PUDUCHERRY	20	20.34	12.5	9.55	47.75
TOTAL	120	102.55	55	36.94	30.78

Ministry of Statistics and Programme Implementation; List updated till May 24, 2017; Figures for 2014-17

»»»» MORE ON LEGISLATORS

[State-wise expenditure details, MPLADS](#)
[Ministry of Statistics and Programme Implementation | 2017](#)

[The decade of MPLADS](#)
[Ministry of Statistics and Programme Implementation](#)
 This report showcases some of the outstanding assets created under MPLADS

[Summary Report of Gram Panchayats for Saanjhi, Phase I and II](#)
[Ministry of Rural Development | 2017](#)
 The online report card of Gram Panchayats for Saanjhi for phase I and II of the scheme

[Sankalan, Initiatives in SAGY Gram Panchayats](#)
[Ministry of Rural Development](#)
 A compendium of good initiatives under the Saansad Adarsh Gram Yojana

[Saansad Adarsh Gram Yojana Guidelines](#)
[Ministry of Rural Development | 2014](#)
 This document presents the complete blueprint of the Saansad Adarsh Gram Yojana for each Member of Parliament to make one village of his or her constituency a Model Village by 2016 and two more model villages by 2019

RELATED WEBSITES

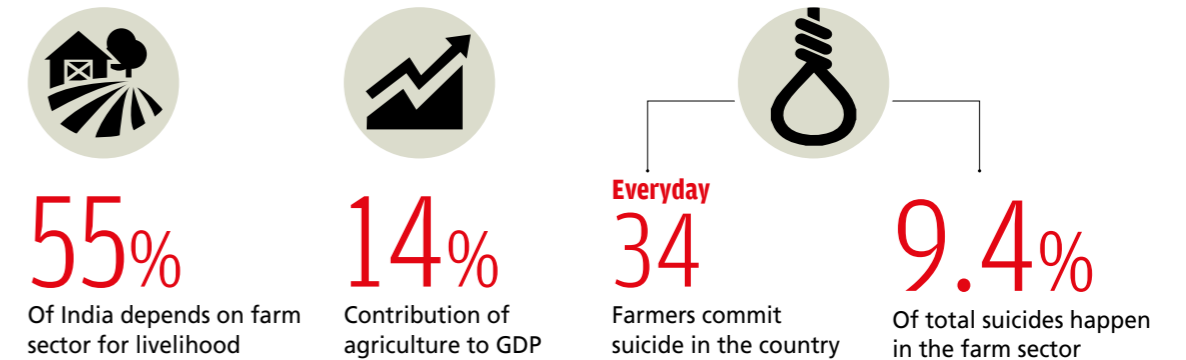
[Saansad Adarsh Gram Yojana](#)

[Members of Parliament Local Area Development Scheme](#)

STATE OF AGRICULTURE

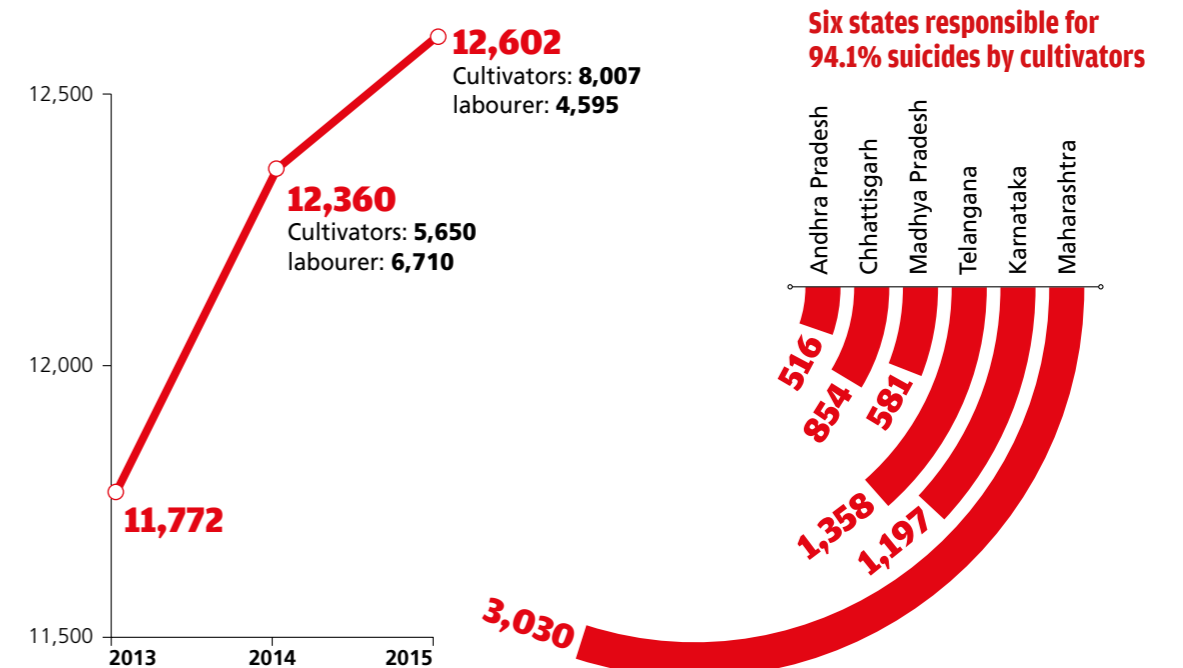
FARMER SUICIDES

Suicides in the farm sector, which includes cultivators and labourers, are on the rise due to crop failures and indebtedness



FARMER SUICIDES ON THE RISE

There has been a 42 per cent increase in the number of suicides committed by cultivators in the past one year



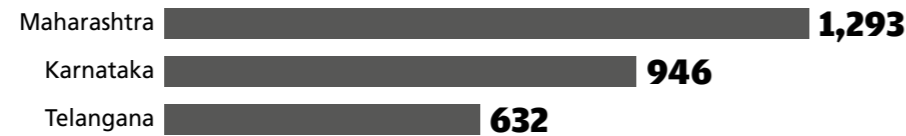
Accidental Deaths & Suicides in India, 2015, National Crime Records Bureau

WHY ARE FARMERS COMMITTING SUICIDE

Debt and crop failures are the reasons for 58 per cent of farmer suicides in the country



Debt
38.7%



93% of suicides due to bankruptcy happen in these three states



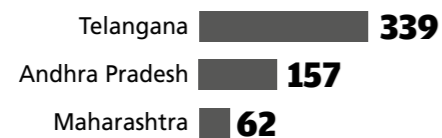
Crop failure due to natural calamities
11%



97.2% Of suicides due to natural calamities-led crop failure happen in these three states



Crop failure for reasons other than natural calamities
8.4%



83% Of suicides due to other reasons happen in these three states

Accidental Deaths & Suicides in India, 2015, National Crime Records Bureau



STATE OF AGRICULTURE

CROP INSURANCE

With extreme weather events on the rise, the Centre launched the Pradhan Mantri Fasal Bima Yojana (PMFBY) and the Restructured Weather-Based Crop Insurance Scheme in April 2016. The two schemes, which plan to cover 50 per cent of cropped area by 2019, already cover 30 per cent of the cropped area and is implemented in 21 states.

However, a closer look at the schemes shows that they have been of little help to the distressed farmers. In fact, insurance companies seem to be the actual beneficiaries. Picture this: just 17 per cent of the total claims raised under the two schemes during the 2016 kharif season have been honoured so far. Under PMFBY, insurance company IFFCO-TOKIO, which is operating in three states including drought-hit Maharashtra, is yet to pay over 86 per cent of the claims

High on claims, low on payouts

₹4,270.55cr | **₹714.14cr** | **39million**
claims arisen in Kharif 2016 | disbursements made so far | farmers covered during Kharif 2016

Ministry of Agriculture and Farmers Welfare, April 7, 2017
Figures are for Pradhan Mantri Fasal Bima Yojana and Restructured Weather-Based Crop Insurance Scheme

AT A PREMIUM

While insurance companies have collected ₹9,041.25 cr as premium, it has paid just 25 per cent (₹570.10 cr) of the total claims made (₹2,324.01 cr) under the Pradhan Mantri Fasal Bima Yojana so far

Tata AIG

Total premium collected
₹422.04cr | % Of claims not paid
17.99%

■ Number of benefited farmers ■ Number of farmers covered



IFFCO-TOKIO

Total premium collected
₹1,159.82cr | % Of claims not paid
85.55%

■ Number of benefited farmers ■ Number of farmers covered



SBI General Insurance

Total premium collected
₹363.66cr | % Of claims not paid
NA*

■ Number of benefited farmers ■ Number of farmers covered



Future Generali India Insurance Company Limited

Total premium collected
₹183.36cr | % Of claims not paid
NA*

■ Number of benefited farmers ■ Number of farmers covered



* Information not available/ claims under process

HDFC ERGO

Total premium collected
₹725.21cr | % Of claims not paid
46.75%

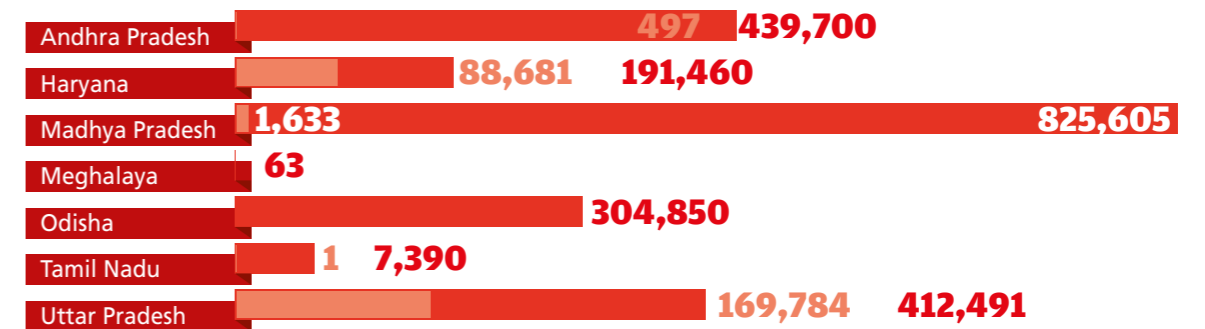
■ Number of benefited farmers ■ Number of farmers covered



ICICI Lombard

Total premium collected
₹1,234.73cr | % Of claims not paid
81.01%

■ Number of benefited farmers ■ Number of farmers covered

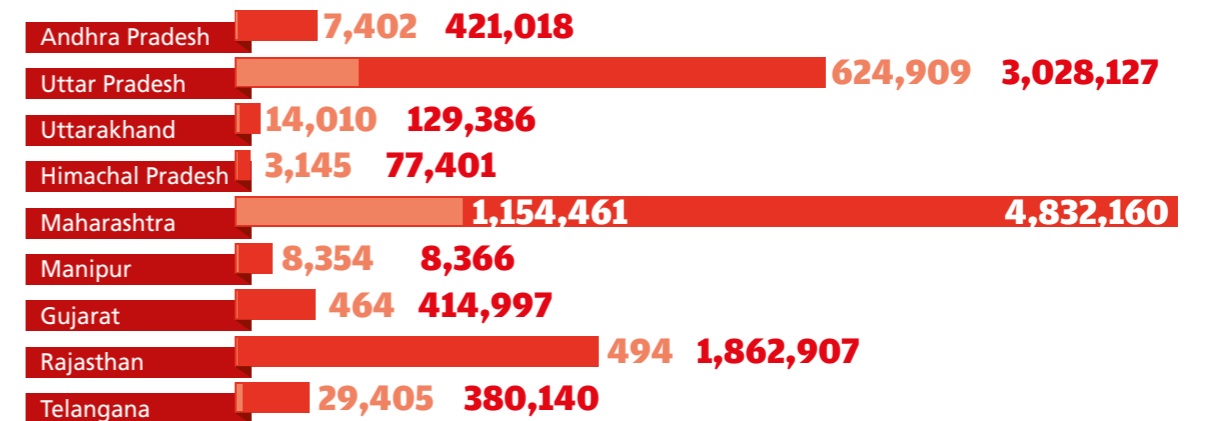


* Claims paid not available for Madhya Pradesh, Meghalaya, Odisha, Tamil Nadu

Agriculture Insurance Company of India

Total premium collected
₹3,610.78cr | % Of claims not paid
76.98%

■ Number of benefited Farmers ■ Number of farmers covered



* Claims figures unavailable for Manipur and Gujarat

Universal Sampo GIC

Total premium collected
₹594.96cr | % Of claims not paid
0.0%

■ Number of benefited Farmers ■ Number of farmers covered

Karnataka **16,589** **949,252**

CHOLAMS GIC

Total premium collected
₹169.80cr | % Of claims not paid
100%

■ Number of benefited Farmers ■ Number of farmers covered

Bihar **125,781**
 West Bengal **1,089,231**

Claims figures unavailable for West Bengal

BAJAJ

Total premium collected
₹576.89cr | % Of claims not paid
98.58%

■ Number of benefited Farmers ■ Number of farmers covered

Bihar **495,372**
 Haryana **802** **274,562**
 Telangana **238,156**

Farmers benefitted unavailable for Bihar and Telangana

Ministry of Agriculture and Farmers Welfare, March 28, 2017

STATE OF AGRICULTURE

AGRI INFRASTRUCTURE

India, rated as a country with serious hunger levels in 2016, loses a substantial amount of farm produce every year due to poor agricultural infrastructure such as cold storage facilities

110% | **₹92,651cr** | **₹44,143cr**
 The increase in the annual losses in just five years | Annual value of harvest and post-harvest losses of major agricultural produces at national level in 2012-13 | Cost of the produce that was lost in 2008-09

GONE BAD

Harvest and post-harvest losses of major crops and commodities

■ % loss of the total production ■ Monetary value

Cereals | ₹20,698 Cr



Pulses | ₹3,877 Cr



Oilseed | ₹8,278 Cr



Fruits | ₹16,644 Cr



Apple

10.39%
₹1,341 Cr



Banana

7.76%
₹3,903 Cr



Citrus

9.69%
₹1,557 Cr

Vegetables | ₹14,842 Cr



Onion

8.2%
₹2,312 Cr



Tomato

12.44%
₹3,666 Cr



Cabbage

9.37%
₹874 Cr

Livestock Produce | ₹18,987 Cr



Egg

7.19%
₹1,320 Cr



Inland Fish

5.23%
₹3,766 Cr



Marine Fish

10.52%
₹4,315 Cr

Plantation Crops and Spices | ₹9,325 Cr



Areca nut

4.91%
₹475 Cr



Black Pepper

1.18%
₹35 Cr



Cashew

4.17%
₹239 Cr

[Harvest and Post Harvest Losses of Major Crops and Livestock Produce in India. All India Coordinated Research Project on Post Harvest Technology. \(ICAR\), Ludhiana \(2015\).](#)

LOW ON COLD STORAGE

3.3 million metric tonnes gap in cold storage requirement

Component	Existing capacity	Approx requirement
Integrated pack houses	249	69,831
Reefer trucks	9,000	61,826
Cold stores	31.8 million tonnes	35.1 million tonnes
Ripening chambers	812	9,131

[Study on all-India cold chain infrastructure capacity. National Centre for Cold Chain Development and NABARD Consultancy, 2015.](#)

STATE OF AGRICULTURE

LAND DESERTIFICATION

Nearly 30% of India is degraded

The situation continues to be bad despite India's commitment to meet the UN Land Degradation Neutrality target by 2030. Desertification has increased by 1.87 million hectares (MHA) between 2003-05 and 2011-13. Of India's total geographical area of 328.72 MHA, 96.4 MHA is under desertification. In nine states, around 40 to 70 per cent of land has undergone desertification

What is land desertification?

Desertification is a type of land degradation in which a relatively dry land region becomes increasingly arid, typically losing its bodies of water as well as vegetation and wildlife

Major reasons for desertification in India



Water erosion

Responsible for **10.98%** desertification*

Loss of soil cover mainly due to rainfall and surface runoff. Water erosion is observed in both hot and cold desert areas, across various land covers and with varying severity levels



Vegetation degradation

Responsible for **8.91%** desertification

It includes deforestation, shifting cultivation and degradation in grazing, grassland and scrub land. Destruction of vegetation, most often by humans, accelerates desertification



Wind erosion

Responsible for **5.55%** desertification

It denotes the spread of sand by various processes, even up to lofty altitudes of Himalayas. It removes the topsoil, which is rich in all plant nutrients and bacterial activities



Salinity

Responsible for **1.12%** desertification

Occurs mostly in cultivated lands, especially in the irrigated areas. Soil salinity refers to the water soluble salt present in soil. Salinity can develop naturally, or human-induced



Human-made/settlement

Responsible for **0.69%** desertification

All land degradation processes which are induced directly or indirectly by human intervention. It includes developmental activities such as mining and urbanisation



Others

Responsible for **2.07%** desertification

They include water logging, frost shattering, mass movement, barren and rocky land types

[Desertification and Land Degradation, Atlas of India 2016 by ISRO.](#)
* percentage figures for the period of 2011-13

GROWING DRY

26 of 29 Indian states have reported an increase in the area undergoing desertification in the past 10 years. Delhi has registered an alarming 11.03% increase in the same period, primarily due to settlement and other human activities

■ Area under desertification

India average

Area under desertification: **29.32%**
% change*: **0.56**

GUJARAT

Area under desertification: **52.29%**
% change: **0.94**
Major causes: Water erosion, salinity

MAHARASHTRA

Area under desertification: **44.93%**
% change: **1.55**
Major causes: Water erosion, vegetation degradation

TAMIL NADU

Area under desertification: **11.87%**
% change: **0.21**
Major causes: Vegetation degradation, settlement

PUNJAB

Area under desertification: **2.87%**
% change: **1.02**
Major causes: Settlement, vegetation degradation

HARYANA

Area under desertification: **7.67%**
% change: **0.55**
Major causes: Wind erosion, settlement

DELHI

Area under desertification: **60.6%**
% change: **11.03**
Major causes: Settlement, vegetation degradation

RAJASTHAN

Area under desertification: **62.9%**
% change: **-0.29**
Major causes: Wind erosion, vegetation degradation

MADHYA PRADESH

Area under desertification: **12.34%**
% change: **0.1**
Major causes: Vegetation degradation, water erosion

GOA

Area under desertification: **52.13%**
% change: **1.76**
Major causes: Vegetation degradation, water erosion

KARNATAKA

Area under desertification: **36.24%**
% change: **0.05**
Major causes: Water erosion, vegetation degradation

KERALA

Area under desertification: **9.77%**
% change: **0.63**
Major causes: Vegetation degradation, settlement

JAMMU & KASHMIR

Area under desertification: **35.86%**
% change: **1.94**
Major cause: Frost shattering

HIMACHAL PRADESH

Area under desertification: **43.01%**
% change: **4.55**
Major causes: Vegetation degradation, frost shattering

UTTARAKHAND

Area under desertification: **12.12%**
% change: **1.25**
Major causes: Vegetation degradation

UTTAR PRADESH

Area under desertification: **6.35%**
% change: **-1.27**
Major causes: Water erosion, vegetation degradation

SIKKIM

Area under desertification: **11.1%**
% change: **0.04**
Major cause: Vegetation degradation

ARUNACHAL PRADESH

Area under desertification: **1.84%**
% change: **0.21**
Major causes: Vegetation degradation, frost shattering

NAGALAND

Area under desertification: **47.45%**
% change: **8.71**
Major causes: Vegetation degradation, settlement

ASSAM

Area under desertification: **9.14%**
% change: **1.84**
Major causes: Vegetation degradation, water logging

MEGHALAYA

Area under desertification: **22.06%**
% change: **0.71**
Major causes: Vegetation degradation, water erosion

MANIPUR

Area under desertification: **26.96%**
% change: **0.4**
Major causes: Vegetation degradation

TRIPURA

Area under desertification: **41.69%**
% change: **10.48**
Major causes: Vegetation degradation, water erosion

MIZORAM

Area under desertification: **8.89%**
% change: **4.34**
Major causes: Vegetation degradation, water erosion

CHHATTISGARH

Area under desertification: **16.36%**
% change: **0.26**
Major causes: Vegetation degradation, water erosion

TELANGANA

Area under desertification: **31.34%**
% change: **-0.52**
Major causes: Water erosion, vegetation degradation

ANDHRA PRADESH

Area under desertification: **14.35%**
% change: **0.19**
Major causes: Vegetation degradation, water erosion

BIHAR

Desertification: **7.38%**
% change: **0.38**
Major causes: Water erosion, vegetation degradation

JHARKHAND

Desertification: **68.98%**
% change: **1.01**
Major causes: Water erosion, vegetation degradation

WEST BENGAL

Desertification: **19.54%**
% change: **0.59**
Major causes: Water erosion, vegetation degradation

ODISHA

Desertification: **34.06%**
% change: **-0.12**
Major causes: Water erosion, vegetation degradation

* % change is calculated for the periods 2003-05 and 2011-2013
[Desertification and Land Degradation, Atlas of India 2016](#) by Space Applications Centre, ISRO



From State of India's Environment in figures 2016

Farm households: Average annual income **Average debt**
₹36,972 in 2017 **₹47,000** in 2015
₹11,628 in 2003 **₹12,585** in 2003

[Get your copy of SoE in Figures 2016](#)

»»»» MORE ON STATE OF AGRICULTURE

[Agricultural statistics at a glance 2015](#)

Ministry Of Agriculture and Farmers Welfare | Oct 2016

This annual publication contains time series statistics on a wide range of parameters, such as production and productivity of various crops across states, price support and procurement, land-use, input use, international trade, credit and insurance

[State of Indian agriculture 2015-16](#)

Ministry Of Agriculture and Farmers Welfare | Oct 2016

This report presents a comprehensive analysis of the recent growth and performance of the agriculture and allied sectors and also analyses the major emerging challenges

[Desertification and land degradation Atlas of India](#)

Indian Space Research Organisation | July 2016

This atlas presents state-wise desertification and land degradation status maps depicting land use, process of degradation and severity level

[Accidental deaths & suicides in India](#)

National Crime Records Bureau | July 2016

The report contains comprehensive information on various aspects of deaths due to accidents and suicides

[Order of the Supreme Court of India regarding farmers suicides in India 27/03/2017](#)

In this order the court asked Central Government to present its proposal on steps to be taken by the State Governments, for dealing with the serious consequences of farmer suicides

[Performance audit on Implementation of Agricultural Debt Waiver and Debt Relief Scheme, 2008](#)

Comptroller and Auditor General of India | March 2013

This report contains the results of the Implementation of Agricultural Debt Waiver and Debt Relief Scheme (ADWDRS), 2008

[Insuring agriculture in times of climate change](#)

Centre for Science and Environment (CSE) | Sep 2016

A scoping study on the role of agriculture insurance in protecting farmers of Asia and Africa from extreme weather events

[All India cold-chain infrastructure capacity assessment of status & gap](#)

National Centre for Cold-chain Development | August 2015

A comprehensive evaluation of the pan-India consumption of perishable food items, to assess the demand, current status and gaps in cold-chain infrastructure

RELATED WEBSITES

[Ministry of Agriculture & Farmers Welfare](#)

[National Horticulture Mission](#)

[Pradhan Mantri Fasal Bima Yojana](#)

STATE OF FORESTS

FOREST CLEARANCES

The Ministry of Environment, Forest and Climate Change granted clearances for forest diversion to 249 projects covering an area of over 10,000 hectares (ha) between January and September 2016. Irrigation projects accounted for the maximum share of the total forest land approved for diversion

36%

Of the total forest land approved for diversion is for irrigation projects

20%

Of the total forest land approved for diversion is for mining projects

FELLING FORESTS

Under the Forest (Conservation) Act, 1980, forest clearances are given in two stages. A proposal is first agreed to "in principle" in which usually the conditions relating to transfer are decided. The "final approval" is given after the receipt of a compliance report from the state government with respect to the stipulated conditions

Category	Final approval		In principle approval		Total	
	No. of projects	Area approved for diversion (ha)	No. of projects	Area approved for diversion (ha)	No. of projects	Area approved for diversion (ha)
Social Services	5	20.68	1	0.022	6	20.702
Hydel	1	0.33	0	0	1	0.33
Industry	6	0.77	0	0	6	0.77
Irrigation	18	2,192	8	1,386.8	26	3,578.8
Mining	17	1,532.84	5	432.38	22	1,965.22
Others*	53	1,580.65	41	351.82	94	1,932.47
Quarrying	1	8.09	0	0	1	8.09
Railway	9	83.59	4	12.09	13	95.68
Rehabilitation [#]	0	0	1	300	1	300
Road	29	486.8	25	873.3	54	1,360.1
Transmission Line	12	248.18	7	220.78	19	468.96
Wind Power	3	154.24	3	121.09	6	275.33
Total	154	6,308.17	95	3,698.28	249	10,006.45

*Others includes the 1,380 ha approved for river bed mining in Uttarakhand which does not involve physical diversion of forest land
[#] The lone rehabilitating project was for communities from Tadoba Andhari Tiger Reserve, Maharashtra
 Ministry of Environment, Forest and Climate Change; Updated till October 17, 2016

STATE OF FORESTS

FOREST FIRES

Over 10,634 incidents of forest fire have been reported between April 1 and May 2, 2016. This is five times more than what was reported during the same period in 2015. Yet 13 states have cut their budgets by 14-72 per cent to fight forest fires

95%

forest fires in the country are manmade, including shifting cultivation

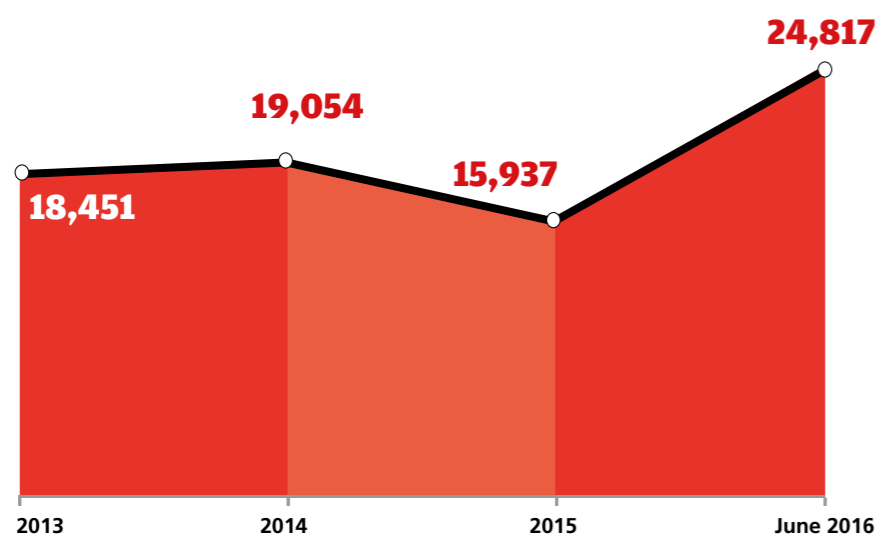
35 million

hectares of forests lost to fires every year

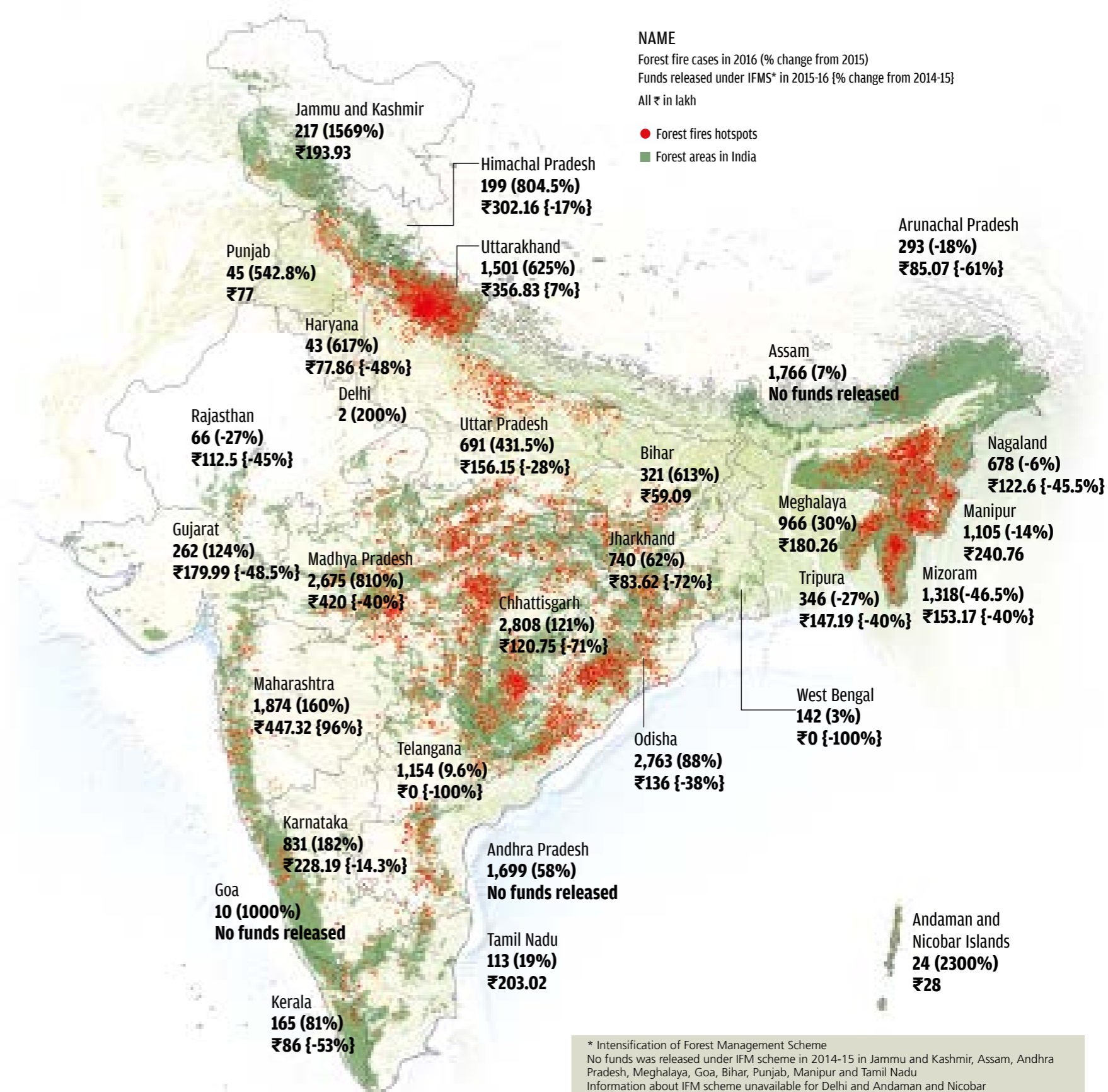
Forest Protection Division, Ministry of Environment and Forests and Climate Change

Burning red

Cases of forest fires over the years



Wildlife Institute of India and India Meteorological Department



* Intensification of Forest Management Scheme
 No funds was released under IFM scheme in 2014-15 in Jammu and Kashmir, Assam, Andhra Pradesh, Meghalaya, Goa, Bihar, Punjab, Manipur and Tamil Nadu
 Information about IFM scheme unavailable for Delhi and Andaman and Nicobar
Ministry of Environment, Forest and Climate Change and Forest Survey of India



From State of India's Environment in figures 2016

While total area under forests are increasing

701,673 sq km in 2015 **697,898 sq km** in 2013

Moderate forests, close to human habitations, are reducing

315,374 sq km in 2015 **318,745sq km** in 2015

[Get your copy of SoE in Figures 2016](#)

»»»» MORE ON FORESTS

[Forest fires and its effect on environment, forests, Bio-diversity and wildlife and remedial/preventive measures](#)

Rajya Sabha | Dec 2016

This parliamentary panel report recommended the Ministry of Environment, Forest and Climate Change to provide increased allocations under the Integrated forest management scheme to the affected states for prevention and mitigation of forest fires

[Nationwide assessment of forest burnt area in India using Resourcesat-2 AWiFS data](#)

Current Science | April 2017

This study provides application of Resourcesat-2 AWiFS satellite imagery for forest burnt area assessment in India

[State of India's forest report 2015](#)

Forest Survey of India | 2015

This biennial report provides a detailed assessment on India's forest resources with statistical data

[Draft National Forest Policy, 2016](#)

Indian Institute Of Forest Management | June 2016

This policy proposes the levy of a green tax. It has also touched upon the contentious issue of human-animal conflict. It will replace the one crafted in 1988

[Forest fire disaster management](#)

National Institute of Disaster Management | 2014

This report compiles important information about forest fires and its management. It covers forest fire & its impacts, forest fire management strategies and related issues at national and international levels

[National Mission for a green India](#)

Ministry of Environment, Forest and climate change

This mission acknowledges the influences that the forestry sector has on environmental amelioration though climate mitigation, food security, water security, biodiversity conservation and livelihood security of forest dependant communities

[Predictive modelling of the spatial pattern of past and future forest cover changes in India](#)

Journal of Earth System Science | Feb 2017

This study was carried out to simulate the forest cover changes in India using Land Change Modeler

RELATED WEBSITES

[Forests Survey of India](#)

[Forests fire alert system, Forests Survey of India](#)

[Forests Clearance, Ministry of Environment, Forest and Climate Change](#)

STATE OF WATER

GROUNDWATER CONTAMINATION

India draws the largest amount of groundwater in the world, despite having alarmingly high levels of contamination

50%
Of groundwater in India is contaminated

55%
Districts have high levels of nitrate

47%
Districts have high levels of fluoride

22%
Districts have high levels of arsenic

13%
Districts have high levels of lead

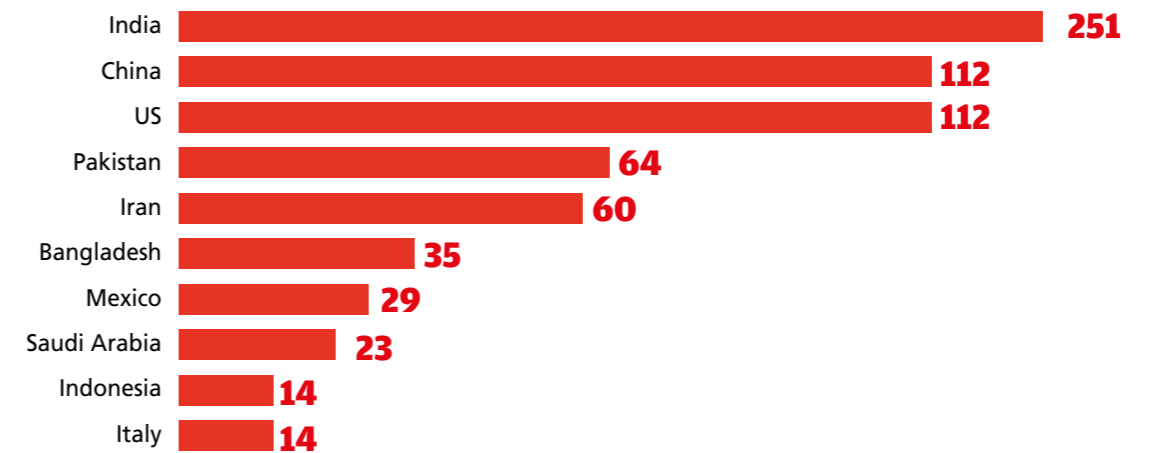
66%
Decrease in the pre-monsoon groundwater levels in 2016 over the decadal average of 2006-15



Over dependent

About 72% of the global groundwater abstraction takes place in these ten countries

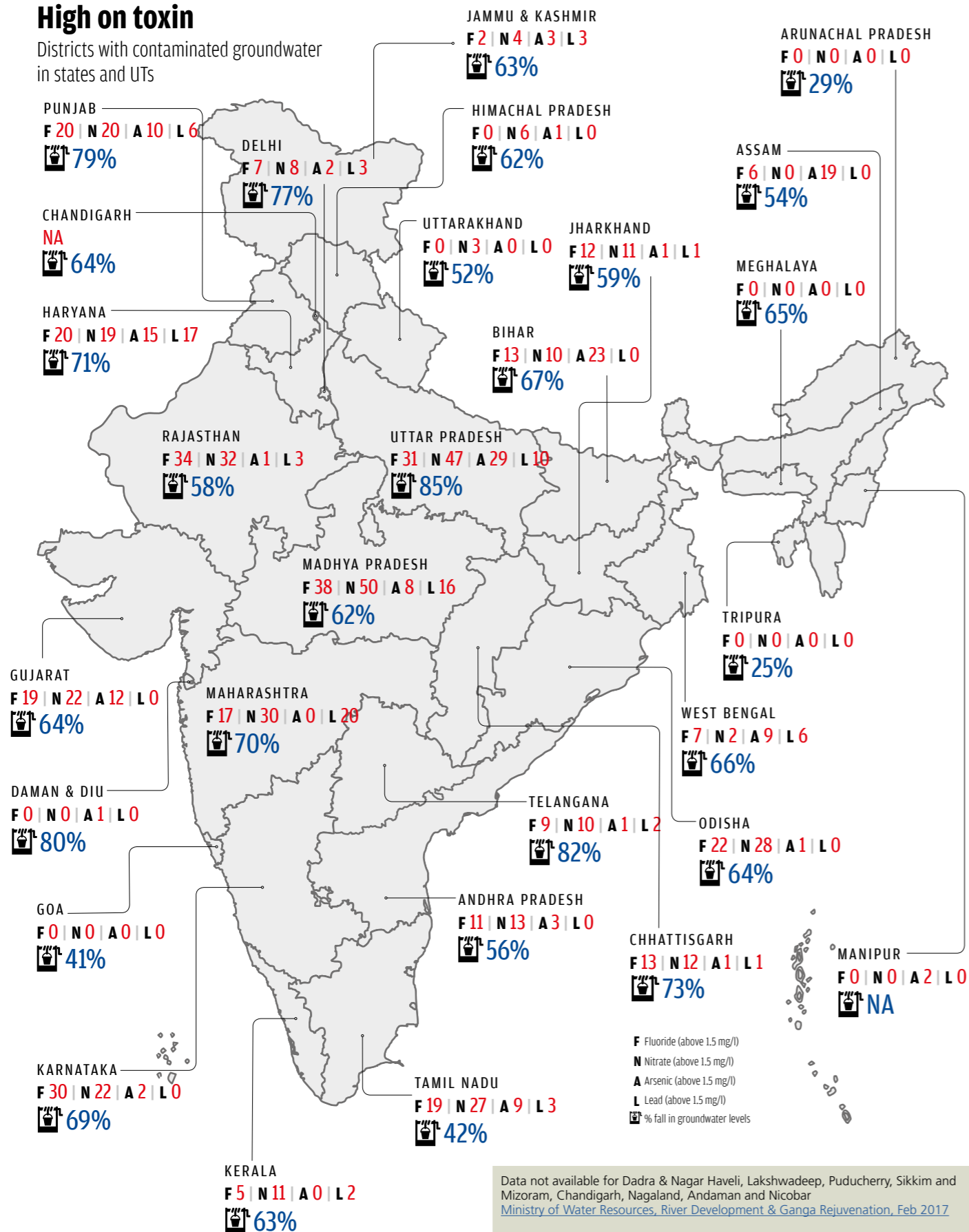
Abstraction (in KM³ per year)



[Managing Water under Uncertainty and Risk Report, UNESCO](#)

High on toxin

Districts with contaminated groundwater in states and UTs



From State of India's Environment in figures 2016

60% Indian rivers polluted and they flow from
 650 towns that release
 62,000 MLD sewage into the rivers every day

Get your copy of SoE in Figures 2016

MORE ON WATER AND GROUNDWATER

[Ground water year book- India 2014-15](#)

This annual book depicts changes in ground water regime of the country through different seasons

[Question raised in Lok Sabha on Contamination of Water](#)

Lok Sabha | Feb 7, 2017

This document provides details on contaminated groundwater and health of people being affected as a result thereof

[A 21st century institutional architecture for India's water reforms: restructuring the CWC and CGWB](#)

Ministry of water resources | July 2016

The proposed National Water Commission will be a science-led agency to advise the States on how much water they can use without affecting rivers and groundwater, taking surface- and groundwater-usage as a single entity

[Handbook on Water and Related Information 2016](#)

A document on water resources and related data by the Central Water Commission

[Water and related statistics 2015](#)

This publication, brought out once in every two years, covers a wide range of data on water resources in the country

[Ground water quality features of the country](#)

This report provides an overview on the state of groundwater in India

[Repair, Renovation and Restoration of Water Bodies- Encroachment on Water Bodies and Steps Required to Remove the Encroachment and Restore the Water Bodies: Standing Committee on Water Resources \(2015-16\)](#)

Lok Sabha | Aug 2016

This report dwells on - state of water bodies in the country, encroachment, its extent and impact, implementation of judicial guidelines in the matter, the provision for prevention of encroachment, pollution of water bodies and measures for increasing public awareness, etc

[UN World Water Development Report, 2017- Wastewater, the untapped resource](#)

This edition of the United Nations WWDR, the fourth in a series of annual, theme-oriented reports, addresses an often overlooked issue that is critical to water resources management and the provision of basic water-related services: wastewater

RELATED WEBSITES

[Central Groundwater Board](#)

[Central Water Commission](#)

[Ministry of Resources, River Development & Ganga Rejuvenation.](#)

[World Water Assessment Programme \(WWAP\)](#)

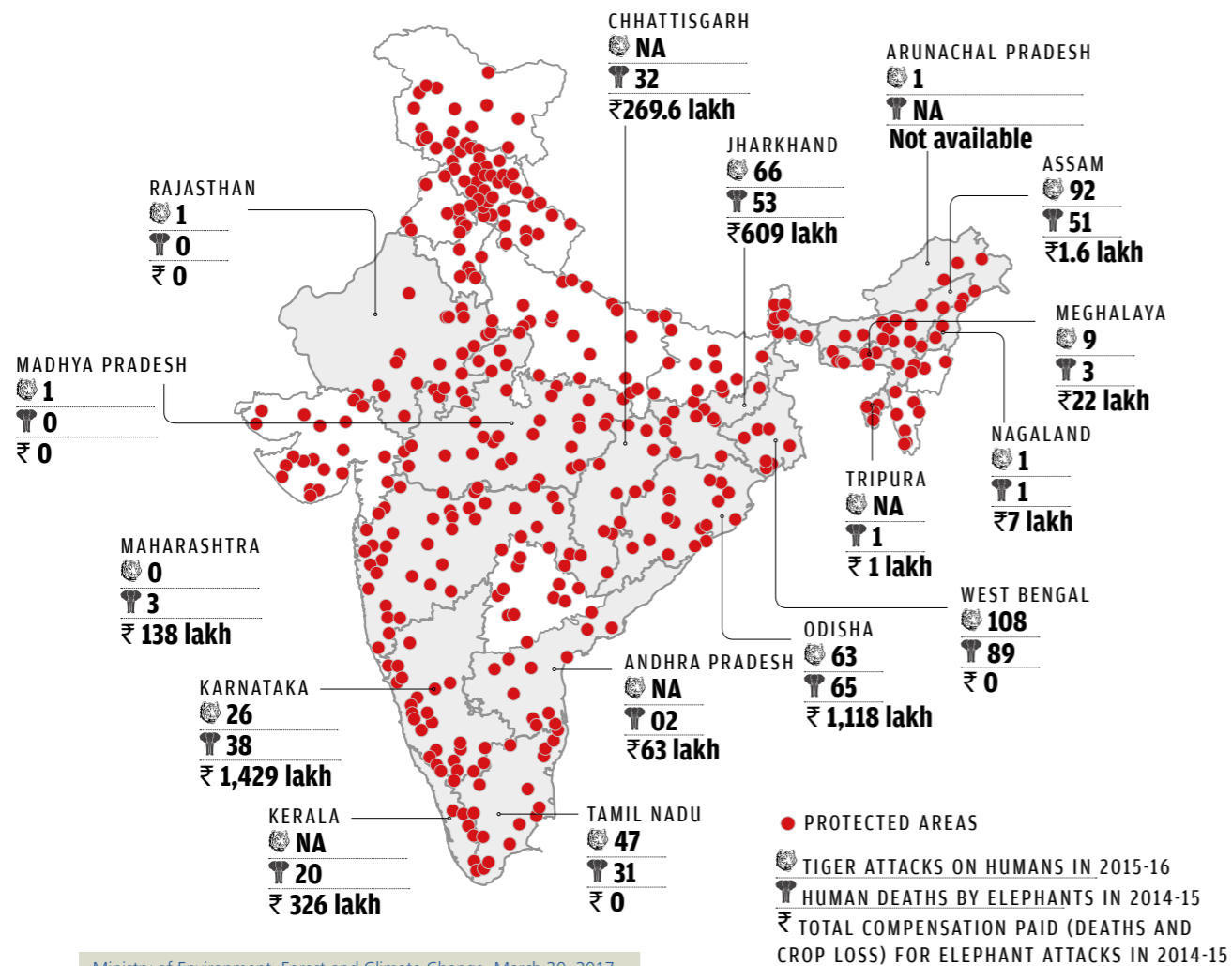
STATE OF WILDLIFE

HUMAN-ANIMAL CONFLICTS

Even as cases of human-animal confrontations increase, India continues to execute developmental projects inside Protected Areas. As a result, the number of Protected Areas is increasing, but the area under them is shrinking over the years

PROBLEM STATES

16 states are facing regular tiger and elephant attacks



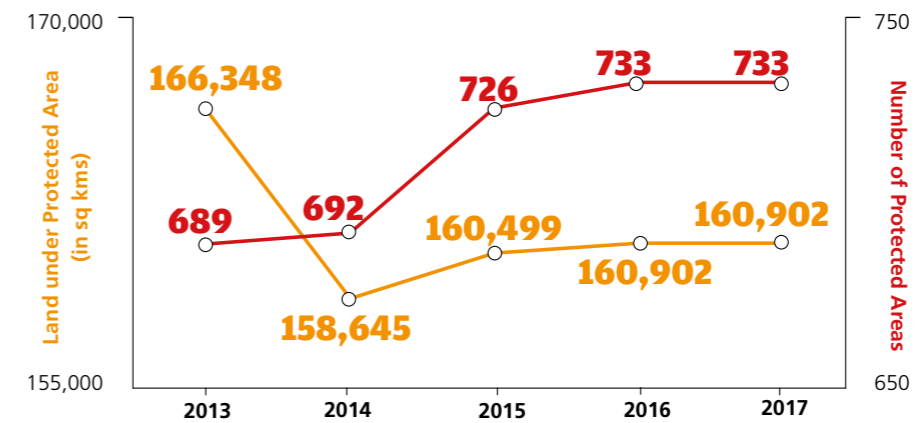
Ministry of Environment, Forest and Climate Change, March 20, 2017

LOSING GROUND

While the number of Protected Areas has increased, the total area under them has shrunk. This is forcing animals to move outside their natural habitat



All-India figure; the list is indicative and not exhaustive as there is not enough data on animals outside protected areas

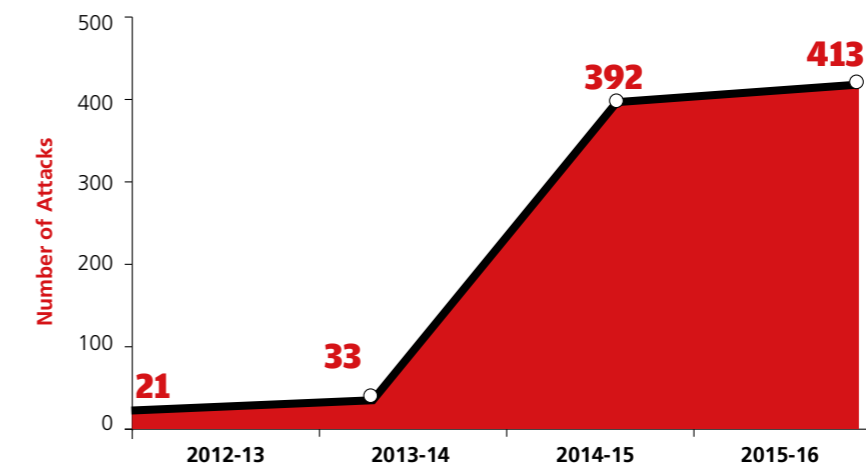


Wildlife Institute of India, Dehradun, as on January 2017



OUT TO HUNT

On an average, 215 tiger attacks are registered in the country every year



1866%

The increase in the number of tiger attacks between 2012-13 and 2015-16

Ministry of Environment, Forest and Climate Change, March 20, 2017



ON THE RISE

There has been an 18 per cent increase in the number of deaths by elephants between 2014-15 and 2015-16

Between 2005-06 and 2015-16

₹110.49 cr

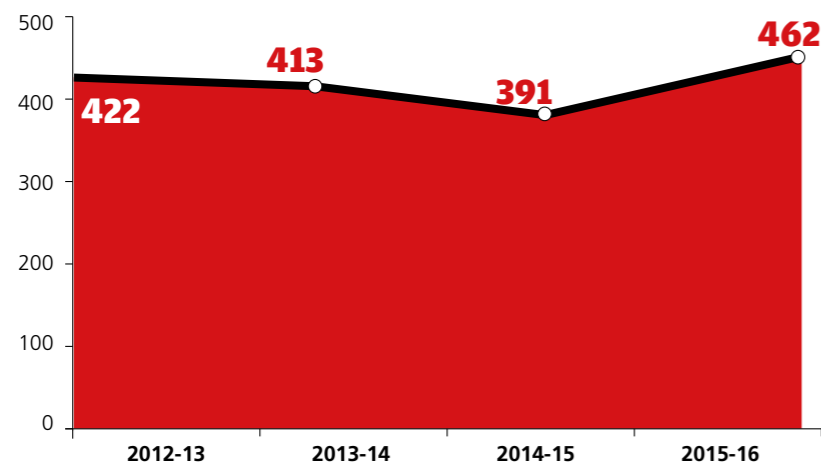
Total compensation paid for elephant attacks

₹98.87 cr

Compensation paid for crop loss by elephants

₹11.62 cr

Compensation paid for loss of human life by elephants



422

The average number of people killed by elephants every year

Ministry of Environment, Forest and Climate Change, March 15, 2016

STATE OF WILDLIFE

POACHING

Even as the Centre drags its foot over the new National Wildlife Action plan (2017-2031), wildlife crimes continue unabated. What is worse, illegal trade has flourished on several popular e-portals in India. In fact, 340 peacocks were killed in 2015-16, which is 193 per cent more than that of 2014

30,382

Wildlife crimes and mortality recorded till Dec 31, 2016

465

Species that are poached in India

37,267

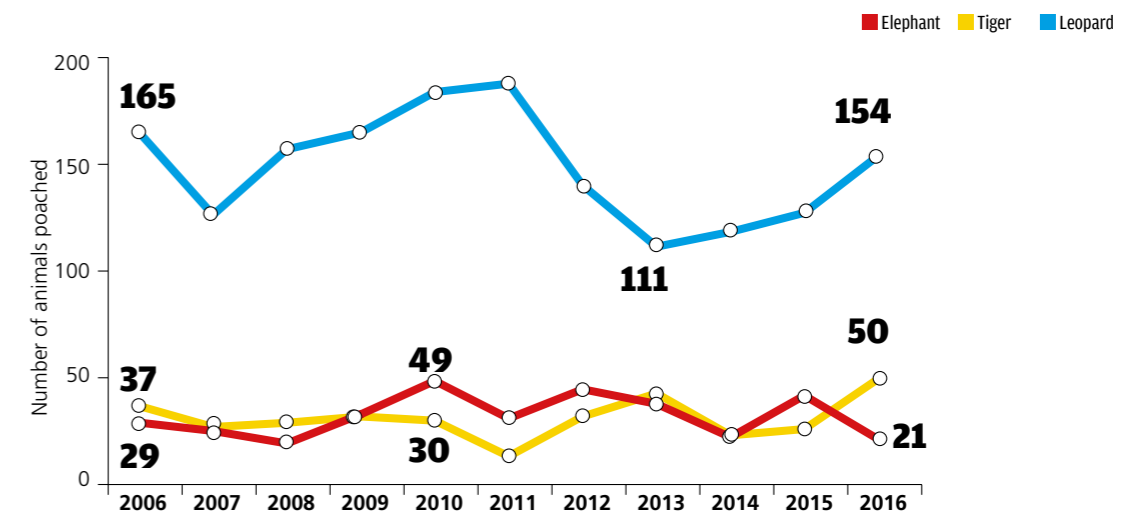
Turtle and tortoises seized in 2015-16

340

Peacocks killed in 2015-16

ALL TIME HIGH

In 2016, 50 tigers were poached, which is the highest in the past decade



Wildlife Protection Society of India, 2017

ILLEGAL TRADE GROWS ONLINE

Ecommerce websites are commonly used to sell illegal animal parts

106

Websites used for illegal wildlife trade in India



Amazon

Quikr

eBay

snapdeal

rediff

indiamart

Olx

Youtube

Ministry of Environment, Forest and Climate Change, July, 2016

PRETTY BAD

The 10 species that were worst hit due to poaching in 2014-16



BLACK BUCK

Poached | 48

Articles seized | 3 skins, 2 horns, 15 kg meat, 1 head, 1 skin piece and legs



CHINKARA

Poached | 33

articles seized | 3 skins, 2 skeletons and meat



LEOPARD

Poached | 97

Articles seized | 1,171 skins, 3 skeletons, 1 skull, 1 skin piece, 14 paws, 31 claws, 19 canines, 104 kg and 124 pieces of bones



RHINOCEROS

Poached | 45

Articles seized | 3 horns and 12 suspected horns



TIGER

Poached | 29

Articles seized | 31 skins, 3 skin pieces, 1 skull, 8 paws, 25 kg meat, 2 pieces of meat, 1 jaw with canine, 30 claws, 11 canines, 309 kg bones, 394 pieces of bones, 6 tooth and 30 whiskers



BLUE BULL

Poached | 53

Articles seized | 1 skin and 95 kg meat



ELEPHANT

Poached | 63

Articles seized | 152.08 kg ivory, 28 tusks, 20 ivory pieces, 12 ivory idols, bones and 4 recovered alive



PEACOCK

Poached | 340

Articles seized | 6 recovered alive, 2 carcasses, 65 kg feather, 24 feather made fans, body parts.



SPOTTED DEER

Poached | 63

Articles seized | 613 skins, 59 kg meat, 2 pieces of meat, 2 heads, 46 antlers and body parts



WILD BOAR

Poached | 57

Articles seized | 2 recovered alive, 157 kg meat, 27 tusks, 1 head, 1 carcass and 1 head

MORE ON WILDLIFE

[Draft National Wildlife Action Plan \(2017-2031\)](#)

Ministry of Environment, Forest and Climate Change | Feb 2016

The draft third National Wildlife Action Plan (NWAP) 2017-2031 unveiled by the environment ministry accords special emphasis to rehabilitation of threatened species of wildlife while conserving their habitats which include inland aquatic, coastal and marine eco-systems

[Crime in India 2015: statistics](#)

National Crime Records Bureau | August 2016

This annual report provides state-wise data on crimes, including environment crimes. It also provides city-level data too on violation of environmental laws

[Reduced to skin and bones re-examined: full analysis](#)

TRAFFIC | Nov 2016

India has recorded the highest number of seizure of tigers and parts among all 13 tiger range countries, accounting for 44 per cent

[Strategic report: environment, peace and security- a convergence of threats](#)

INTERPOL | Dec 2016

More than 80 per cent of countries consider environmental crime a national priority says this report

[The rise of environmental crime: a growing threat to natural resources peace, development and security](#)

UNEP | June 2016

The value of the black market industry behind crimes such as ivory smuggling, illegal logging and toxic waste dumping has jumped by 26% since 2014

[Protected Planet Report 2016: how protected areas contribute to achieving global targets for biodiversity](#)

UNEP World Conservation Monitoring Centre (UNEP-WCMC) | Sep 2016

This report assesses how protected areas contribute to achieving the Strategic Plan for Biodiversity and relevant targets of the Sustainable Development Goals

RELATED WEBSITES

[Wildlife Institute Of India](#)

[Wildlife Protection Society of India](#)

[Tigernet](#)

[Project Tiger](#)

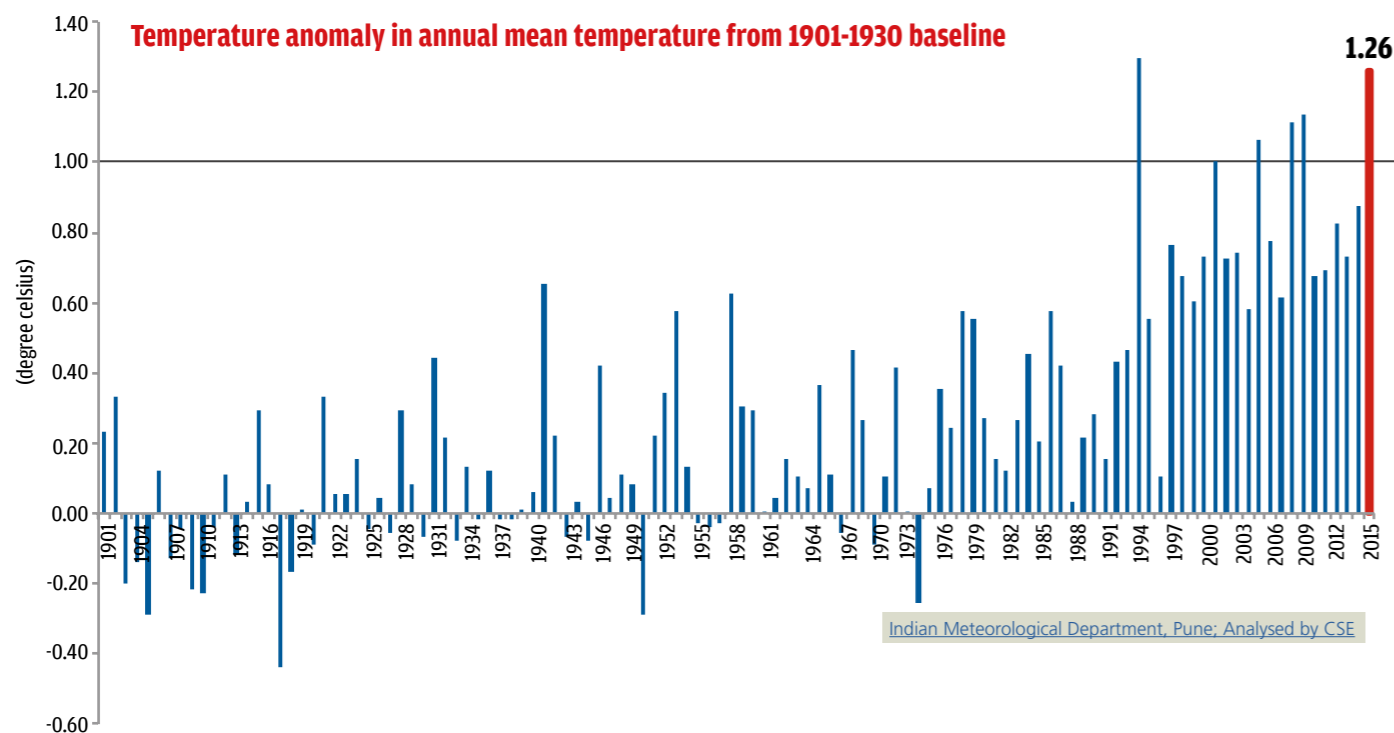
STATE OF CLIMATE

INDIA WARMING

India is warming faster than the rest of the world. In fact in 2016, the average temperature was 1.2 degrees celcius higher than the average temperature between 1901 and 1930. This should serve as a ringing bell for the country which pledged at the Paris agreement in 2015 not to allow the average temperature to rise beyond 1.5 degree celcius above pre industrial levels

LAST TWO DECADES HAVE BEEN THE WARMEST

Since 1995, which was India's warmest year ever, there have been six years when the country's temperature has breached the 1 degree barrier



HOTTER THAN THE WORLD

The difference between the average annual temperatures of India and the world was the maximum in 1995

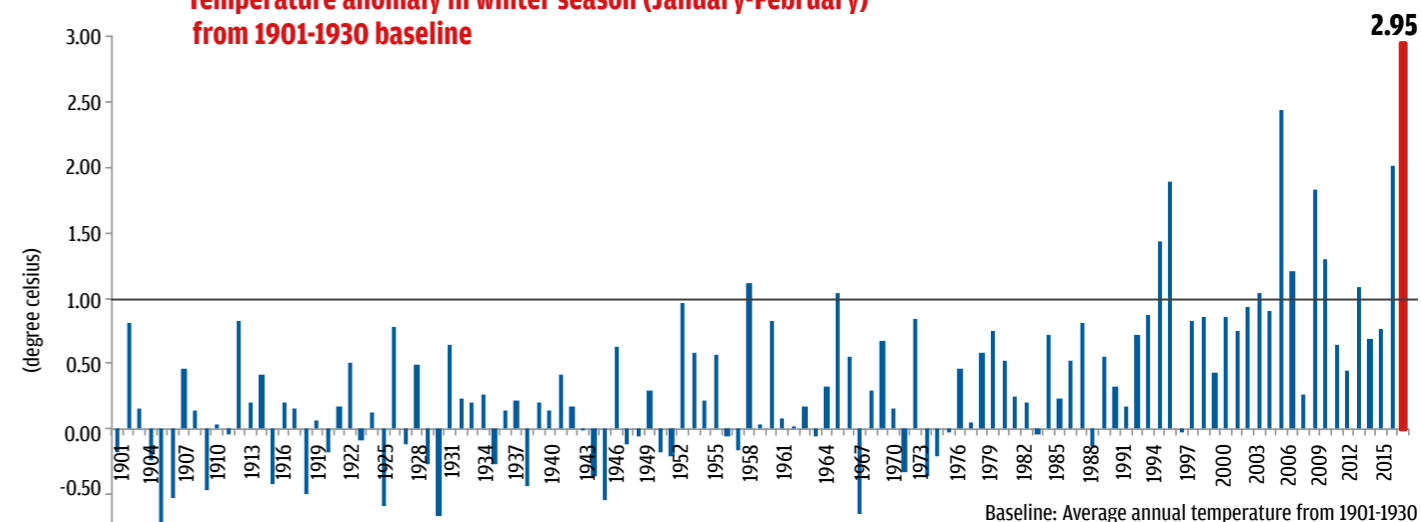
Year	1901	1902	1904	1906	1907	1908	1911	1912	1915	1916	1921	1922	1924	1928	1929	1931	1932	1941	1946	1953	1958	1960	1966	1969	1973	1979	1980	1985	1987	1995	1996	1999	2002	2006	2009	2010	2016
GLOBAL	0.07	-0.06	-0.18	0.05	-0.13	-0.17	-0.20	-0.10	0.18	-0.04	0.14	0.03	0.04	0.12	-0.01	0.25	0.20	0.35	0.26	0.43	0.38	0.28	0.26	0.36	0.39	0.39	0.42	0.30	0.52	0.65	0.51	0.64	0.83	0.84	0.84	0.89	1.10
INDIA	0.23	0.33	-0.13	0.12	-0.12	-0.04	-0.03	0.11	0.29	0.08	0.33	0.05	0.15	0.29	0.08	0.44	0.21	0.65	0.42	0.57	0.62	0.29	0.36	0.46	0.41	0.57	0.55	0.45	0.57	1.29	0.55	0.67	1.00	1.06	1.11	1.13	1.26

Indian Meteorological Department, Pune; Analysed by CSE

SEASONAL WORRY

Three out of the four seasons or eight months in a year, the temperatures in India have breached the aspirational goal of 1.5 degrees set in the Paris agreement

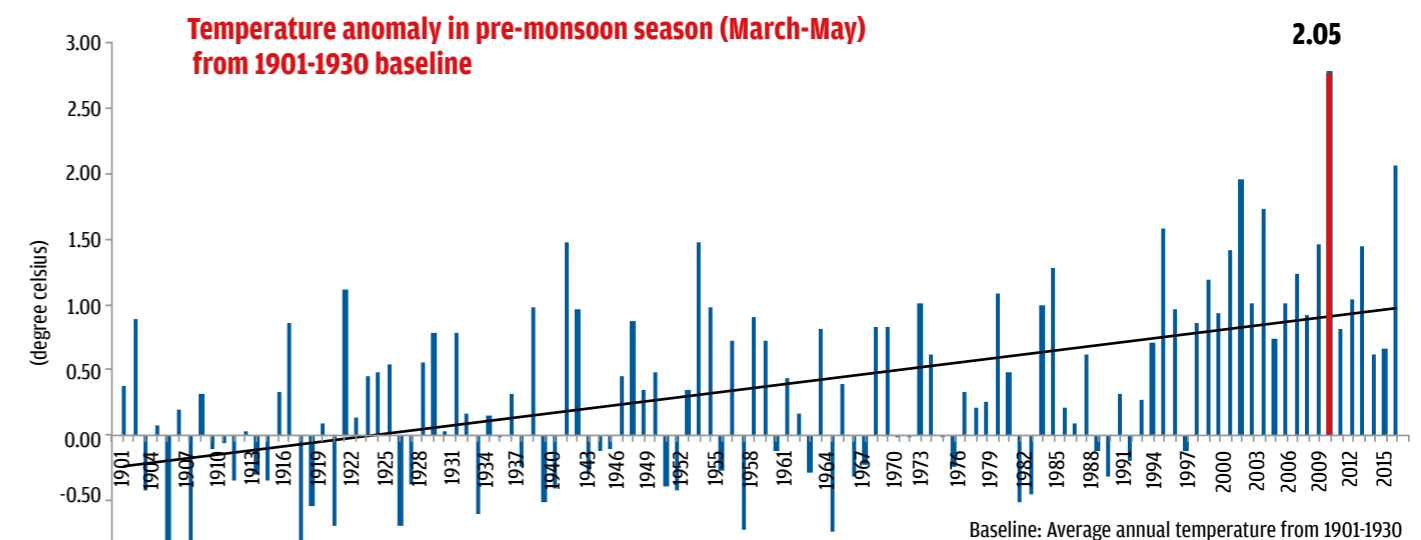
Temperature anomaly in winter season (January-February) from 1901-1930 baseline



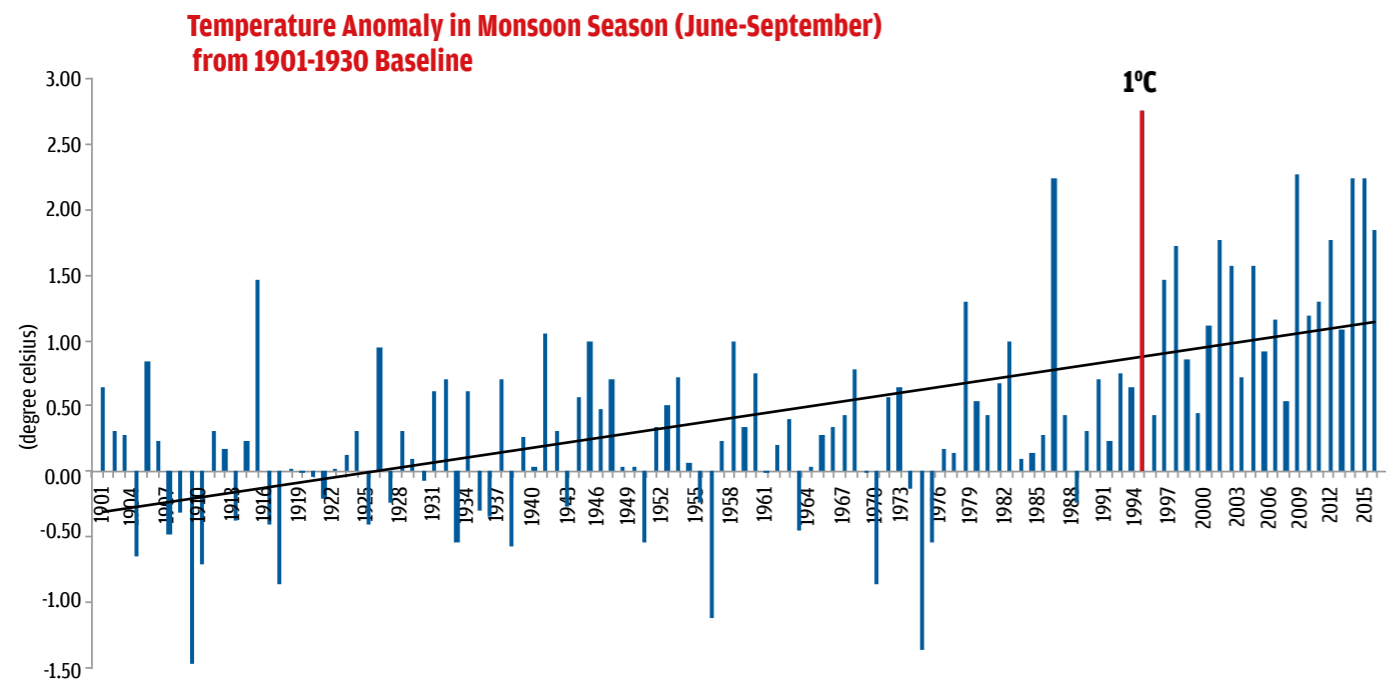
21.84 °C
The warmest ever winter was recorded in **2017**

27.83 °C
The warmest ever pre-monsoon was recorded in **2010**

Temperature anomaly in pre-monsoon season (March-May) from 1901-1930 baseline

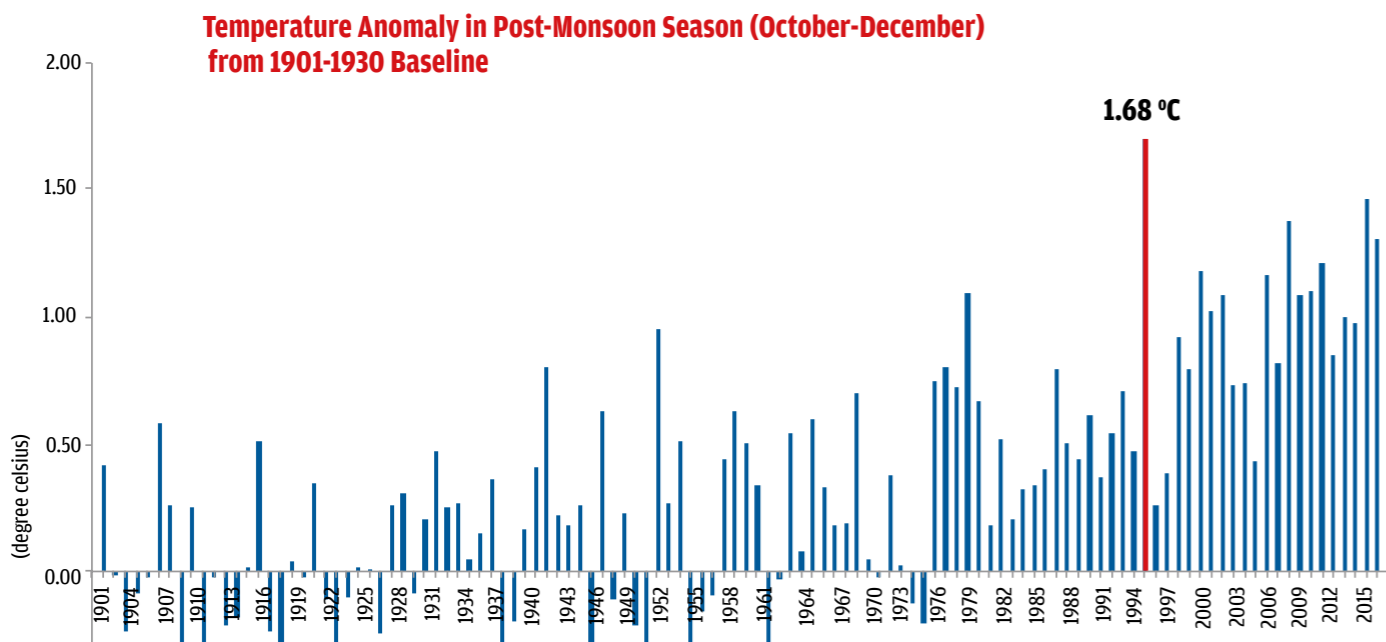


Annual temperature anomaly in India and global averages from 1901-1930 baseline



28.07 °C
The warmest ever monsoon was recorded in **1995**

23.19 °C
The warmest ever post-monsoon was recorded in **1995**



Indian Meteorological Department, Pune; Analysed by CSE

STATE OF CLIMATE

EXTREME WEATHER EVENTS

More than 1,500 people died due to extreme weather events in 2016, which was the second warmest year ever recorded

MAJOR EXTREME WEATHER EVENTS IN 2016

RAJASTHAN

35 people died during **floods and heavy rainfall** between July 11 and August 30. Another **39 people** died due to **lightning**

GUJARAT

87 people died due to **heat waves** in April-May and another **81 people** died due to **floods and heavy rains** in June-September

MAHARASHTRA

Heat waves in April-May claimed **43 lives**, which were followed by **floods and heavy rains** (June-September) that claimed another **36 lives**. **Lightning** claimed **40 lives**

TELANGANA

At least **300 people** died due to **heat waves** in April-May

ANDHRA PRADESH

While **heat waves** in April-May killed **100 people**, **floods and heavy rains** in September 15-28 killed **21 people**

UTTARAKHAND

Floods and heavy rainfalls in July 3-23 killed **46 people**

UTTAR PRADESH

Thunderstorms in June 17-22 killed **40 people** and **lightning** killed **52 people**. **Cold waves** in December killed **21 people**

BIHAR

146 people died due to **floods and heavy rains** between July 25 and September 3. **Lightning** claimed **60 lives** in May-June. **Cold waves** killed **32 people** in December

ASSAM

33 people died due to **floods and heavy rains** in July 3-August 13

MADHYA PRADESH

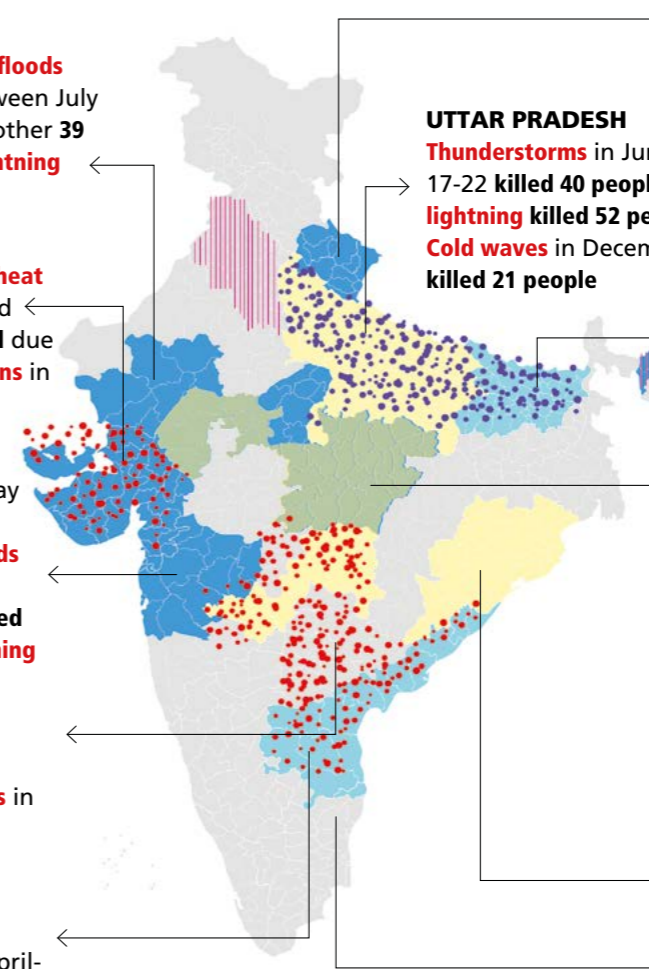
Floods and heavy rains killed **48 people** in June 30-August 20. **Lightning** killed **101 people**

ODISHA

Lightning claimed **132 lives** in April, May, June, September and October

TAMIL NADU

18 people died due to **floods and heavy rains** caused by cyclone Vardah



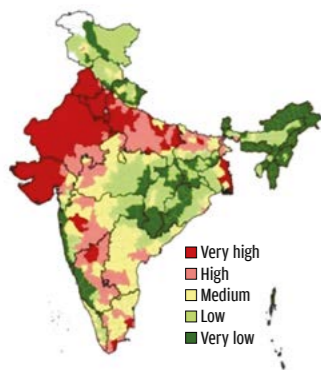
Heat waves Floods / heavy rain Lightning/thunderstorm
Cold wave Deficient rainfall

Indian Meteorological Department, Pune, January 13, 2017

STATE OF CLIMATE

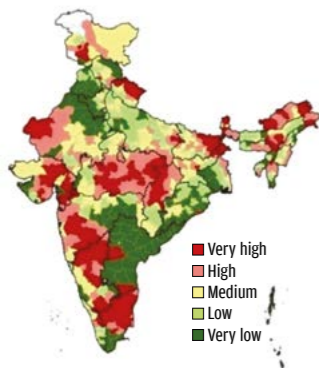
FARMS AT RISK

By 2050, India is likely to experience a temperature rise of 1-4 °C; rainfall will increase by 9-16 per cent. This will have a detrimental effect on farmers in more than half of the country



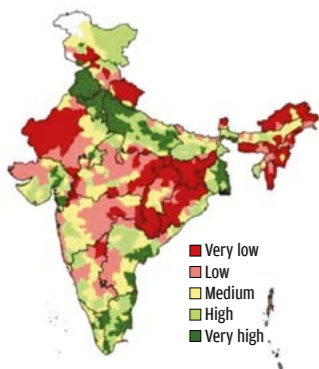
Sensitivity 12 states*

have districts that are highly sensitive to climate change. Sensitivity is the degree to which a region gets affected by climate-related stimuli, such as climate variability and the frequency and magnitude of extremes events like cyclone and drought. It is determined by demographic and environmental conditions of the region. Most districts in north-western India are highly sensitive to climate change impacts. Eastern, north-eastern, northern and west coast of the country have relatively low sensitivity.



Exposure 21 states*

have districts that are highly exposed to climate change risks. Exposure is defined as the nature and degree to which a system is exposed to significant climatic variations. It includes parameters, such as maximum and minimum temperatures and the number of rainy days. High to very high exposure is observed in the districts of Madhya Pradesh, Karnataka, Rajasthan, Gujarat, Maharashtra, Bihar, Tamil Nadu, north-eastern states and Jammu & Kashmir. Districts with low exposure are seen in Andhra Pradesh, Odisha, West Bengal, Punjab, Haryana, Rajasthan and Uttar Pradesh.

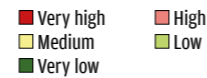


Adaptive capacity 17 states#

have districts with low adaptive capacity to climate change. Adaptive capacity is the ability of a region to adjust to climate change. It is a function of wealth, technology, education, skills, infrastructure, access to resources, and management capabilities. Adaptive capacity is found to be very low in the eastern and north-eastern states, Rajasthan, Madhya Pradesh, peninsular and hill regions. Adaptive capacity is high in Punjab, Haryana, western Uttar Pradesh and Tamil Nadu.

Vulnerability 60% of rural districts** are vulnerable to climate change

Vulnerability is assessed on the basis of sensitivity, exposure and adaptive capacity of an area. Districts in Rajasthan, Gujarat, Madhya Pradesh, Karnataka, Maharashtra, Andhra Pradesh, Tamil Nadu, eastern Uttar Pradesh and Bihar exhibit very high and high vulnerability. Districts along the west coast, northern Andhra Pradesh and north-eastern states are relatively less vulnerable



Haryana
79% districts are vulnerable

Rajasthan
100% districts are vulnerable

Gujarat
84% districts are vulnerable

Madhya Pradesh
87% districts are vulnerable

Maharashtra
61% districts are vulnerable

Goa
100% districts have low vulnerability

Karnataka
70% districts are vulnerable

Kerala
87% districts have low vulnerability

Tamil Nadu
69% districts are vulnerable

Jammu & Kashmir
50% districts are vulnerable

Himachal Pradesh
50% districts are vulnerable

Uttarakhand
62% districts are vulnerable

Punjab
53% districts are vulnerable

Uttar Pradesh
77% districts are vulnerable

Bihar
76% districts are vulnerable

Sikkim
100% districts have low vulnerability

Arunachal Pradesh
100% districts have low vulnerability

Nagaland
100% districts have low vulnerability

Manipur
67% districts have low vulnerability

Mizoram
88% districts have low vulnerability

Tripura
100% districts have low vulnerability

Meghalaya
86% districts have low vulnerability

Assam
87% districts have low vulnerability

Andaman & Nicobar islands
100% districts have low vulnerability

Telangana
67% districts have low vulnerability

Andhra Pradesh
69% districts have low vulnerability

West Bengal
53% districts are vulnerable

Jharkhand
89% districts are vulnerable

Odisha
67% districts have low vulnerability

Chhattisgarh
69% districts are vulnerable

Note: Andhra Pradesh was reorganised into Telangana and Andhra Pradesh in 2014 and a part of Khammam district in Telangana was placed in Andhra Pradesh. This change was not accounted for. *Only states with very high and high exposure and sensitivity districts have been counted. #Only states with districts that have very low and low adaptive capacity have been counted. **Districts with very high, high and medium levels have been considered vulnerable. Climate projections are for the period 2021-2050

A District Level Assessment of Vulnerability of Indian Agriculture to Climate Change report, Current Science, May 25, 2016



From State of India's Environment in figures 2016

Just two sectors responsible for 90% GHGs in India

Energy sector **71%**

Agriculture **18%**

[Get your copy of SoE in Figures 2016](#)

»»»» MORE ON CLIMATE

[Statistics related to climate change India 2015](#)

Ministry of Statistics and Programme Implementation | Nov 2015

This publication provides data on causal factors behind climate change; impact factors of climate change; and mitigation and adaptation

[Prime Minister's Agenda 10: India's disaster risk management roadmap for sustainable development](#)

National Institute Of Disaster Management (NIDM) | Dec 2016

This paper analyzes the linkages between the Indian Prime Minister's Agenda 10 on Disaster Risk Management and the three major agreements to which India is signatory to, including the Sendai Framework for Disaster Risk Reduction, the Paris Climate Agreement and the Sustainable Development Goals

[State level climate change trends in india](#)

India Meteorological Department , Ministry of Earth Sciences | 2013

This publication consists of long term and latest data (1951-2010) of well distributed 282 stations for temperatures and 1451 stations for rainfall series in India, provides insight into climate change occurring over smaller areas

[Extreme weather events over India in the last 100 years](#)

J. Ind. Geophys. Union | July 2005

This paper presents a factual and a brief review of the extreme weather events that occurred in India during the last 100 years (1991-2004)

[A district level assessment of vulnerability of Indian agriculture to climate change](#)

Current Science | May 2016

Adopting the definition of vulnerability given by IPCC, this study had assessed climate vulnerability for 572 rural districts of India. It showed that districts with higher levels of vulnerability are located in the western and peninsular India

[The impact of high-end climate change on agricultural welfare](#)

Science Advances | Aug 2016

Climate change can have detrimental impacts on global agricultural welfare, especially after 2050, because losses in consumer surplus generally outweigh gains in producer surplus warns this study

[The costs of climate change impacts for India: a preliminary analysis](#)

Council on Energy | March 2015

This preliminary assessment estimates the cost of global climate change impacts for India

[Natural catastrophes and man-made disasters in 2016: a year of widespread damages](#)

Swiss Reinsurance Company (Swiss Re) | March 2017

This sigma document provides a summary of disaster events in 2016. In sigma criteria terms, there were 327 disaster events in 2016, of which 191 were natural catastrophes and 136 were manmade

RELATED WEBSITES

[Ministry of Environment, Forest and Climate Change](#)

[India Meteorological Department](#)

STATE OF ENVIRONMENT

ENVIRONMENTAL CRIMES

There has been a 12 per cent decline in the number of environmental crimes reported in the country between 2014 and 2015. Rajasthan and Uttar Pradesh accounted for 75 per cent of the cases. Among mega-cities, Bengaluru has registered the maximum number of incidents under the Indian Forest Act, 1927, with 48 cases, followed by Kota (18 cases) and Delhi (13 cases).

5,156

Total number of cases during 2015

8

Number of states and UTs with no environmental crimes reported

75%

Share of environmental crime cases from Rajasthan and Uttar Pradesh

[National Crime Research Report 2015, National Crime Records Bureau](#)

MAJOR ENVIRONMENTAL LAWS

Indian Forest Act, 1927

Attempts to consolidate and reserve the areas having forest cover, or significant wildlife, to regulate movement and transit of forest produce. It also defines the procedure to be followed for declaring an area to be a Reserved Forest, a Protected Forest or a Village Forest. It defines what is a forest offence, what are the acts prohibited inside a Reserved Forest, and penalties leviable on violation of the provisions of the Act

Wild Life Protection Act, 1972

Provides for the protection of wild animals, birds and plants. It extends to the whole of India, except the State of Jammu and Kashmir which has its own wildlife act. It has six schedules which give varying degrees of protection. Schedule I and part II of Schedule II provide absolute protection. The plants in Schedule VI are prohibited from cultivation and planting

Environment (Protection) Act, 1986

Provides for the protection and improvement of environment and prevention of hazards to human beings, other living creatures, plants and property as per decisions taken at the United Nations Conference on the Human Environment held at Stockholm in June, 1972. It was implemented in the wake of the Bhopal Gas Tragedy

Air (Prevention and Control of Pollution) Act, 1981

Last amended in 1987, the Act attempts to contain air pollution levels in the country. The Central Board for the Prevention and Control of Water Pollution implements the provisions of the Act

Water (Prevention & Control of Pollution) Act, 1974

Was enacted to prevent the pollution of water by industrial, agricultural and household wastewater that can contaminate our water sources. The main objectives of the Act are to prevent water pollution, and maintain or restore of wholesomeness of water in the country. The Act was last amended in 2003

CRIMES AGAINST THE ENVIRONMENT

Uttar Pradesh and Rajasthan have the maximum number of people arrested for environmental crimes

	Indian Forest Act, 1927		Wild Life Protection Act, 1972		Environmental (Protection) Act, 1986		Air (Prevention & Control of Pollution) Act, 1981		Water (Prevention & Control of Pollution) Act, 1974		Total Environment-Related Offences	Total number of people arrested
	No. of crimes committed	No. of people arrested	No. of crimes committed	No. of people arrested	No. of crimes committed	No. of people arrested	No. of crimes committed	No. of people arrested	No. of crimes committed	No. of people arrested		
S T A T E S												
Andhra Pradesh	177	1,088	2	5	1	1	0	0	1	1	181	1,095
Arunachal Pradesh	0	2	3	5	0	0	0	0	0	0	3	7
Assam	31	50	74	120	0	0	0	0	0	0	105	170
Bihar	4	5	0	0	0	0	0	0	0	0	4	5
Chhattisgarh	0	0	12	29	0	0	0	0	0	0	12	29
Goa	0	0	0	0	6	5	0	0	0	0	6	5
Gujarat	7	7	20	22	1	1	0	0	3	9	31	39
Haryana	9	16	10	23	1	0	0	0	0	0	20	39
Himachal Pradesh	101	206	12	18	0	0	0	0	0	0	113	224
Jammu & Kashmir	5	9	4	2	0	0	0	0	0	0	9	11
Jharkhand	198	185	34	0	0	0	1	1	0	0	233	186
Karnataka	135	190	74	129	1	1	1	1	0	0	211	321
Kerala	12	2	2	0	1	0	0	0	0	0	15	2
Madhya Pradesh	16	31	3	4	1	3	0	0	0	0	20	38
Maharashtra	18	19	20	65	46	79	42	80	1	1	127	244
Manipur	4	4	0	0	0	0	0	0	0	0	4	4
Meghalaya	0	0	0	0	0	0	0	0	0	0	0	0
Mizoram	0	0	1	1	0	0	0	0	0	0	1	1
Nagaland	0	0	0	0	0	0	0	0	0	0	0	0
Odisha	0	0	0	0	0	0	0	0	0	0	0	0
Punjab	4	8	1	1	0	0	0	0	0	0	5	9
Rajasthan	1,828	2,027	239	328	3	3	3	3	1	0	2,074	2,361
Sikkim	0	0	0	0	0	0	0	0	0	0	0	0
Tamil Nadu	14	28	2	6	1	0	0	0	0	0	20	34
Telangana	6	6	9	14	0	0	0	0	1	1	16	21
Tripura	0	0	0	0	0	0	0	0	0	0	0	0
Uttar Pradesh	1,311	2,345	234	386	234	235	0	0	0	0	1,779	2,966
Uttarakhand	41	48	14	21	0	0	0	0	0	0	55	69
West Bengal	6	8	50	60	1	0	3	0	3	1	63	69
U N I O N T E R R I T O R I E S												
Andaman & Nicobar	0	0	0	0	0	0	0	0	0	0	1	0
Chandigarh	0	0	0	0	2	1	0	0	0	0	2	1
D&N Haveli	0	0	0	0	0	0	0	0	0	0	0	0
Daman & Diu	0	0	0	0	0	0	0	0	0	0	0	0
Delhi UT	41	60	8	22	0	0	0	0	0	0	49	82
Lakshadweep	0	0	1	2	0	0	0	0	0	0	1	2
Puducherry	0	0	0	0	0	0	0	0	0	0	0	0
All India	3,968	6,344	829	1,263	299	329	50	85	10	13	5,156	8,034

National Crime Research Report 2015, National Crime Records Bureau

The five states with highest number of total environment-related offences

»»»» **MORE ON ENVIRONMENTAL CRIMES**

[Crime in India 2015: statistics | Aug 2016](#)

Environment related crimes in the country came down by over 11% last year compared to 2014 but there was no decline in states like Uttar Pradesh, Uttarakhand, Jharkhand and Assam

[Strategic report: environment, peace and security- a convergence of threats](#)

Interpol | Dec 2016

More than 80 per cent of countries consider environmental crime a national priority, with the majority saying new and more sophisticated criminal activities increasingly threaten peace and security.

[The rise of environmental crime: a growing threat to natural resources peace, development and security](#)

UNEP | June 2016

The value of the black market industry behind crimes such as ivory smuggling, illegal logging and toxic waste dumping has jumped by 26% since 2014 to between \$91bn (£62bn) and \$258bn, according to an assessment by the UN and Interpol

[World wildlife crime report: trafficking in protected species](#)

United Nations Office On Drugs And Crimel May 2016

This first global assessment of its kind highlights how the poaching and illegal trade of thousands of species worldwide presents real environmental dangers and ultimately undermines the rule of law by potentially fuelling conflict.

[Analysis of international funding to tackle illegal wildlife trade](#)

World Bank | Nov 2016

The first-ever review of international donor funding for combatting illegal wildlife trade in Africa and Asia,

[Halting the illegal trade of CITES species from World Heritage Sites](#)

WWF | April 2017

Poaching, illegal logging and fishing in nearly 30 per cent of World Heritage sites are driving endangered species to the brink of extinction warns the new WWF report

RELATED WEBSITES

[National Crimes Record Bureau](#)

[Wildlife Crime Control Bureau , Ministry of Environment & Forests, Government of India](#)

[United Nations Office On Drugs And Crime](#)

[Interpol](#)

[CITES](#)

[WWF- India](#)

[Tigernet](#)

STATE OF HEALTH

VECTOR-BORNE DISEASES

Despite a surge in the number of vector-borne diseases in 2016, the government has failed to exhaust the budget allocated to fight these diseases in 2016-17

22%

Of the budget allocated for vector-borne diseases in between 2013 and 2017 went unspent

390%

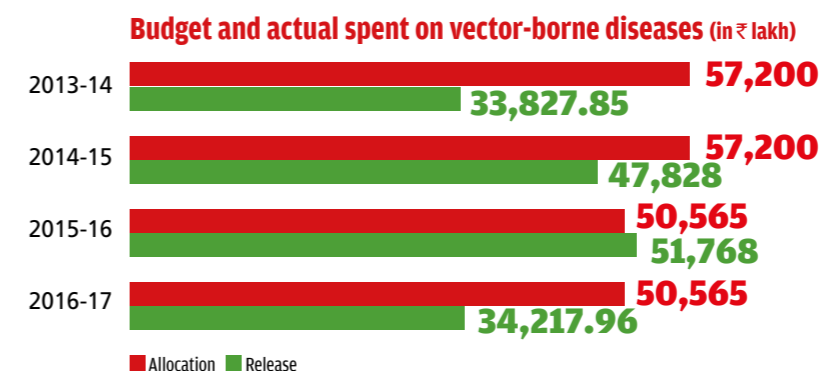
The increase in the number of chikungunya cases between 2014 and 2016

280%

The increase in the number of dengue cases between 2014 and 2016

SAVING WITHOUT A REASON

The government spent just 68 per cent of the funds in 2016-17, even though vector-borne diseases outbreaks were on the rise



States that spent the most from the allocated funds in 2016-17

Chhattisgarh **334%** | Andhra Pradesh **109%** | Bihar **101%**

States that spent the least from the allocated funds in 2016-17

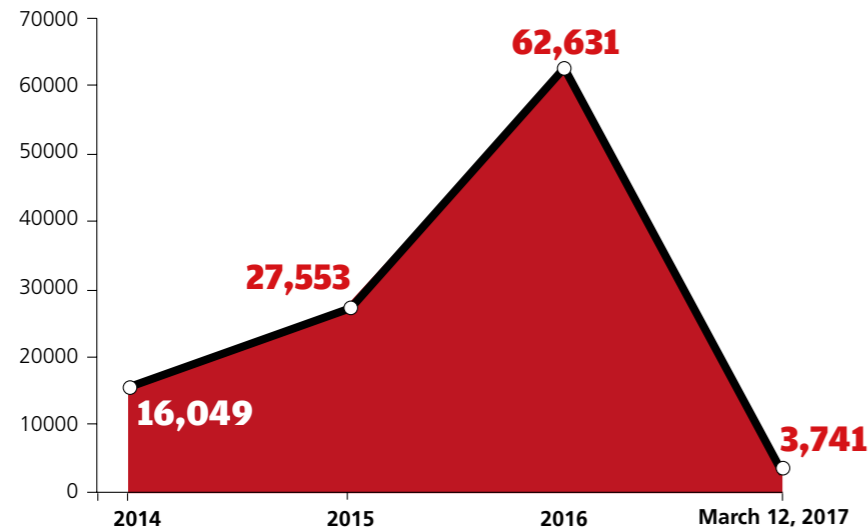
Delhi **0%** | Haryana **0%** | Himachal Pradesh **0%**

[Ministry of Health and Family Welfare, March 24, 2017](#)

ALARMING RISE

Though no deaths have so far been reported, there has been a fourfold increase in the number of cases reported in just two years (2014 to 2016)

Clinically suspected cases of chikungunya reported in the country



States that registered minimum chikungunya cases in 2016

Lakshwadeep 0 | Dadra and Nagar Haveli 0 | Jammu & Kashmir 1

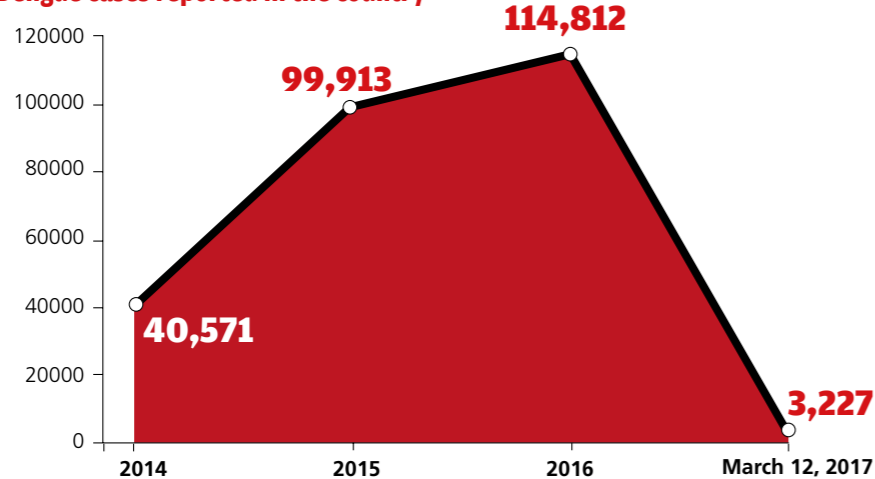
States that registered maximum chikungunya cases in 2016

Karnataka 15,552 | Delhi 12,279 | Maharashtra 7,354

CAUSE FOR WORRY

There has been close to three-fold increase in the number of dengue cases between 2014 and 2016

Dengue cases reported in the country



States that registered minimum dengue cases in 2016

Arunchal Pradesh 13 | Manipur 51 | Jammu & Kashmir 79

States that registered maximum dengue cases in 2016

West Bengal 17,702 | Punjab 10,475 | Odisha 8,380

[Ministry of Health and Family Welfare, March 24, 2017](#)

STATE OF HEALTH

OBESITY

Obesity has become a problem for India with almost 20 per cent of the population overweight. One of the reasons could be the ever-increasing share of processed food in our diet. Picture this: households, both rural and urban, are spending less on food today than just ten years ago, but are spending substantially more on processed food

AN UNHEALTHY TREND

Both obesity and processed food consumption are on the rise

Between 2005-06 and 2015-16

96%

Increase in obese men

64%

Increase in obese women

Between 2004-05 and 2011-12

28.8%

Increase in processed food consumption in rural

14.5%

Increase in processed food consumption in urban

[National Family Health Survey 2015-16, International Institute for Population Sciences and Key Indicators of Household Consumer Expenditure in India, 68th Round of NSSO, July 2011- June 2012](#)



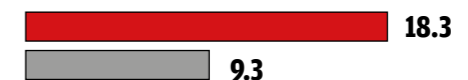
WE ARE GETTING FAT

Nearly one in every five Indian is obese

Women (in %)



Men (in %)

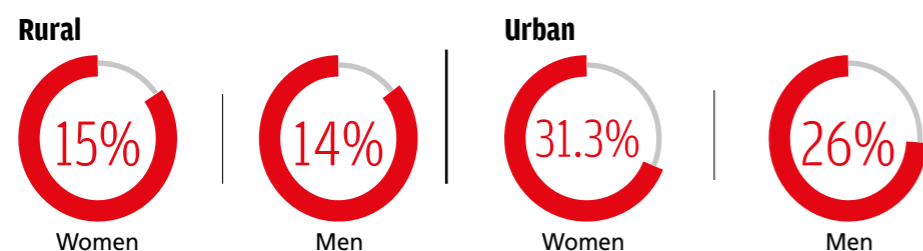


Definition: Overweight: BMI \geq 25.0 kg/m

[National Family Health Survey 2015-16, International Institute for Population Sciences](#)

URBAN SPRAWL

City dwellers are twice as likely to be obese than village dwellers



Definition: Overweight: BMI \geq 25.0 kg/m

Most obese states

Women:

Puducherry **36.7%** | Goa **36.6%** | Andhra Pradesh **36.2%**

Men:

Puducherry **37.1%** | Sikkim **34.8%** | Andhra Pradesh **33.5%**

Least obese states

Women:

Bihar **11.7%** | Meghalaya **12.2%** | Madhya Pradesh **13.6%**

Men:

Meghalaya **10.1** | Madhya Pradesh **10.9%** | Bihar **12.6%**

National Family Health Survey 2015-16, International Institute for Population Sciences

WHY WE SHOULD WORRY

Obesity is the primary trigger for lifestyle diseases. As a result, people suffering from three major lifestyle diseases are also on the rise

Cardiovascular diseases

38 million

Indians had heart problems in 2005

64.1 million

Indians had heart problems in 2015

Diabetes

8.6%

Women in India are diabetic

11.9%

Men in India are diabetic

Diabetes: Blood sugar level $>$ 140 mg/dl

Hypertension

8.8%

Women in India have hypertension

13.6%

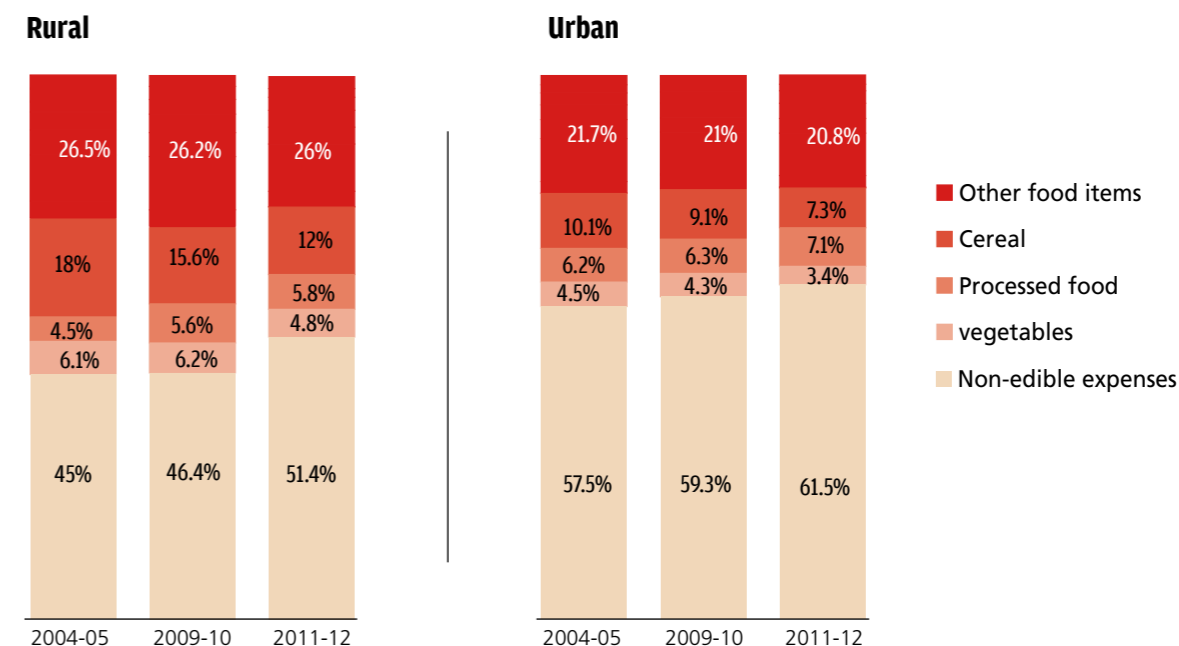
Men in India have hypertension

Systolic $>$ 140 mm of Hg and/or Diastolic $>$ 90 mm of Hg

National Family Health Survey 2015-16, International Institute for Population Sciences and Ministry of Health and Family Welfare, November 18, 2016

WE EAT LESS AND WE EAT JUNK

While Indians are spending less on food, the share of processed food is increasing at the cost of cereals and vegetables

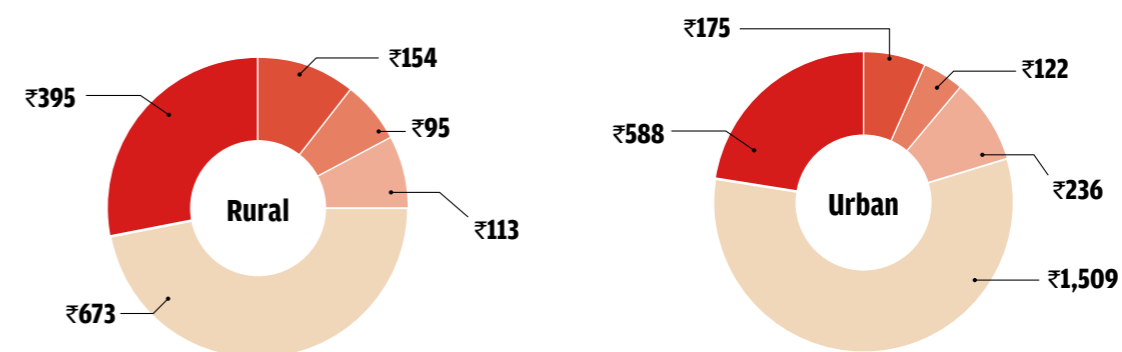


"Processed food" refers to purchased food items such as beverages, jams, pickles, etc. This table uses Monthly per Capita Expenditure using Uniform Reference Period method, which involves asking people about their consumption expenditure across a 30-day recall period

Other food items include pulses, milk, edible oil, egg, meat and fish, fruits, sugar, salt and spices

JUNK IS THE NEW STAPLE

Both rural and urban households spend more on processed food than on vegetables



Other food items Cereal Beverages Vegetables Non-edible expenses

This table uses Monthly per Capita Expenditure using Modified mixed reference period method, in which, for some food items, instead of a 30-day recall, only a 7-day recall is collected. Also, for some low-frequency items, instead of a 30-day recall, a 1-year recall is collected. This is believed to provide a more accurate reflection of consumption expenditures

Key Indicators of Household Consumer Expenditure in India, 68th Round of NSSO, July 2011- June 2012

STATE OF HEALTH

NUTRITION

Not only are we consuming less nutritious food, the nutrition levels in cereals, pulses and vegetables has reduced over the past three decades. *Down To Earth* compares the report of the National Institute of Nutrition released in 2017 with its previous report published in 1989 for the values of seven nutrients in 10 types of food. The snapshot analysis shows that most cereals, pulses and vegetables now have less carbohydrate, protein and micronutrients, but more fat. Micronutrients have significantly reduced in fruits, while protein is now low in milk and eggs

	MACRONUTRIENTS (in g/100g)						MICRONUTRIENTS (in µg/100g)							
	Protein		Carbohydrate		Fat		Thiamine (vitamin B1)		Iron		Magnesium		Zinc	
	2017	% change from 1989 level	2017	% change	2017	% change	2017	% change	2017	% change	2017	% change	2017	% change
Rice (raw milled)	7.94	16.76	78.24	0.05	0.52	4	0.05	-16.66	0.65	-7.14	19.30	-78.55	1.21	-13.57
Wheat (whole)	10.59	-17.26	64.72	-9.10	1.47	-2	0.46	2.22	3.97	-25	125	-9.42	2.85	5.55
Whole green gram	22.53	-6.12	46.13	-18.64	1.14	-12.30	0.45	-4.25	4.89	11.13	198	55.90	2.67	-11
Tomato (ripe, hybrid)	0.76	-15.55	3.20	-11.11	0.25	25	0.04	-66	0.22	-65.62	11.86	NA	0.11	-73.17
Potato (brown skin, big)	1.54	-3.75	14.89	-34.11	0.23	130	0.06	-40	0.57	18.75	24.07	-19.76	0.28	-47.17
Apple	0.29	45	13.11	-2.16	0.64	28	0.03	NA	0.26	-60	8.09	15.57	0.09	50
Banana (ripe, robusta variety)	1.23	2.50	23.63	-13.12	0.33	10	0.01	-80	0.28	-22	34.98	-14.68	0.14	-6.66
Mustard seeds	19.51	-2.45	16.80	-29.41	40.19	1.23	0.55	-15.38	13.49	70.76	266	NA	4.03	-16.04
Buffalo milk	3.68	-14.41	8.39	67.80	6.58	1.23	0.05	25	0.16	-20	10.05	NA	0.30	NA
Eggs (poultry, whole)	13.28	-0.15	NA	NA	9.15	-31.20	0.06	-40	1.82	-13.33	12.01	-7.61	1.23	NA

Values cannot be compared for certain ingredients as they are not mentioned in the 1989 report Indian Food Composition Tables (IFCT), 2017 and 1989 editions, National Institute of Nutrition



From State of India's Environment in figures 2016

Indians prefer private hospitals

Population going to private hospitals **72%** rural **79%** urban

Even though its costlier

Average cost of hospitalisation **₹25,850** private **₹6,120** public

[Get your copy of SoE in Figures 2016](#)

»»»» MORE ON HEALTH

[National Health Profile 2016](#)

Central Bureau of Health Intelligence | May 2017

The National Health Profile highlights substantial health information under six major indicators

[National Family Health Survey 2015-16 \(NFHS-4\): India fact sheet](#)

Ministry of Health and Family Welfare | March 2017

The National Family Health Survey 2015-16 (NFHS-4), the fourth in the NFHS series, provides information on population, health and nutrition for India and each State / Union territory

[National Health Policy 2017](#)

Ministry of Health and Family Welfare | March 2017

The National Health Policy, 2017 approved by Union Cabinet focus on preventive and promotive health care and universal access to good quality health care services

[Report of the Expert Group on issue of High Fat, Sugar and Salt \(HFSS\) and its health effects on Indian population](#)

FSSAI | May 2017

The report recommends moving towards ensuring calorically adequate and nutritionally appropriate sustainable diets for all individuals at each stage of his/her life course

[Economics of non-communicable diseases in India](#)

World Economic Forum | Nov 2014

India stands to incur a loose \$4.58 trillion between 2012 and 2030 due to Non-Communicable Diseases (NCDs) and mental health conditions says this report

[Non-communicable diseases country profiles](#)

WHO | 2014

This report provides an updated overview of the Noncommunicable diseases (NCD) situation for each country including India

[Trends in adult body-mass index in 200 countries from 1975 to 2014: a pooled analysis of 1698 population-based measurement studies with 19.2 million participants](#)

Lancet | April 2016

Underweight and severe and morbid obesity are associated with highly elevated risks of adverse health outcomes

[National Framework for Malaria Elimination \(NFME\) in India 2016-2030](#)

Ministry of Health and Family Welfare | March 2016

This framework is an attempt to eliminate malaria from the country and contribute to improved health and quality of live and alleviation of poverty

RELATED WEBSITES

[Health Statistics Information Portal](#)

[Ministry Of health and family welfare](#)

[National Vector Borne Disease Control Programme](#)

[Central Bureau of Health Intelligence](#)

STATE OF AIR POLLUTION

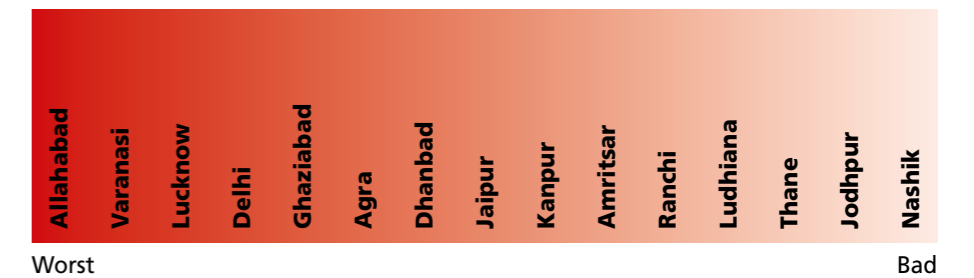
CITIES AT RISK

In 2016, CPCB identified 94 non-attainment cities and issued directions to them to implement measures to mitigate air pollution. While Delhi figures in the worst 15 cities from the list, most of the others are smaller towns and cities

PM₁₀ levels

PM₁₀ (particulate matter ≤ 10 microns) is the most widely monitored pollutant by CPCB

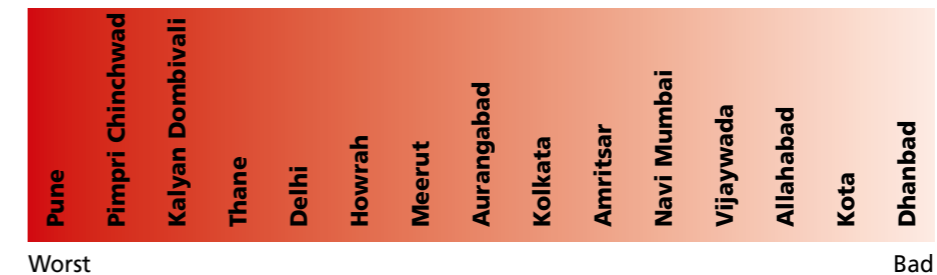
PM₁₀ levels in **13 of the 15** worst cities have deteriorated from 2015



Nitrogen dioxide levels

Nitrogen dioxide (NO₂) reacts to form smog and acid rain and is central to the formation of particulate matters

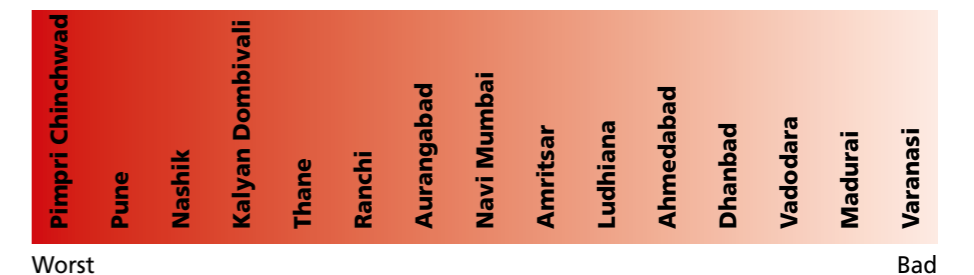
NO₂ levels in **11 of the 15** worst cities have deteriorated from 2015



Sulfur dioxide levels

Exposure to sulfur dioxide (SO₂) makes breathing difficult

SO₂ levels in **13 of the 15** worst cities have deteriorated from 2015



Ministry of Environment, Forest and Climate Change, February 6, 2017

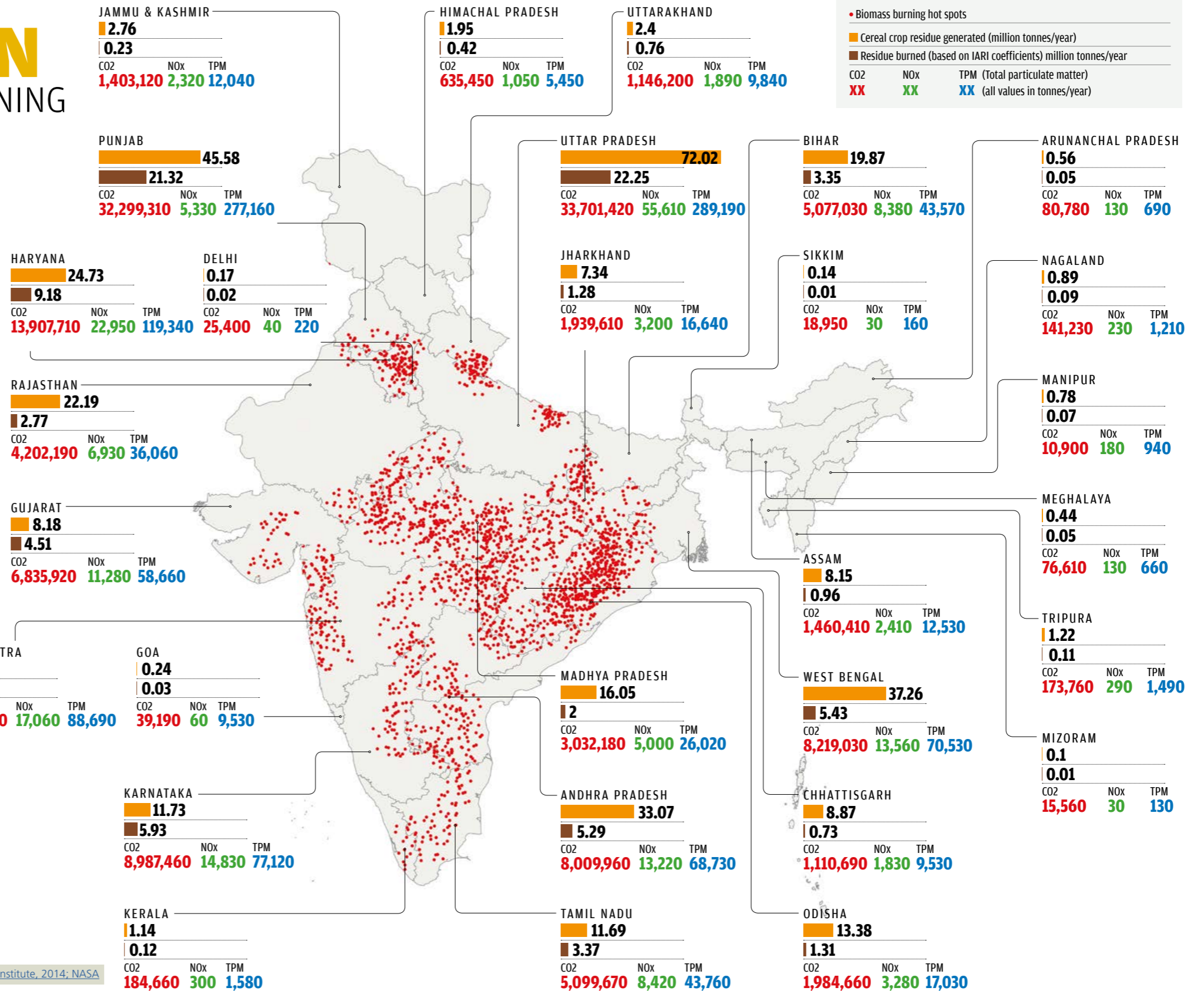
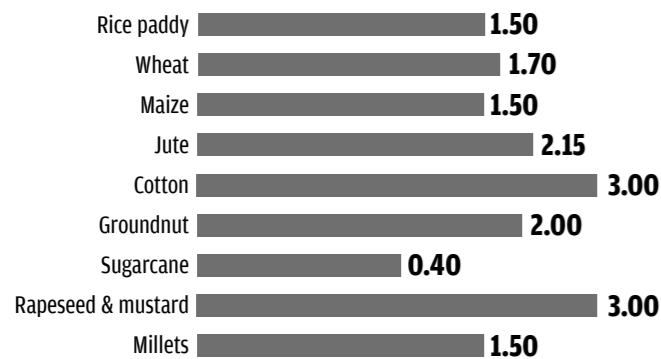
STATE OF AIR POLLUTION

CROP BURNING

In November 2016, the Capital literally came to a standstill because of the smog created by the burning of crop residue in neighbouring Haryana and Punjab. Worryingly, the practice has become popular in other parts of the country. And today, the particulate matter emitted from crop burning across India in a year is more than 17 times the total annual particulate pollution in Delhi from all sources such as vehicles, garbage burning and industries

Residue to crop ratio

Ratio of waste generated to crop output. The smaller the figure, the lesser the waste



Emissions of Air Pollutants from Crop Residue Burning in India, Indian Agricultural Research Institute, 2014; NASA



From State of India's Environment in figures 2016

83% of the 46 million-plus pollution cities have unfit ambient air

60% of the cities have critical air pollution levels

3 cities have moderate air pollution levels

[Get your copy of SoE in Figures 2016](#)

»»»» MORE ON AIR POLLUTION

[National Air Quality Index Status of Indian Cities in 2015-16](#)

CPCB | May 2016

The status report on ambient air quality index of 23 Indian cities

[WHO's Urban Ambient Air Pollution database-Update 2016](#)

The 2016 version of the database consists mainly of urban air quality data – annual means for PM10 and/or PM2.5 – covering about 3,000 human settlements in 103 countries for the years 2008-2015

[Supreme Court bans sale of BS-III vehicles from April 1, 2017](#)

Supreme Court | March 29, 2017

The Supreme Court ordered a ban on the registration of new Bharat Stage III vehicles from April 1, 2017 when BS IV emission norms would come in force

[Emission norms for vehicles in India](#)

CPCB

[Report of assessment of Pollution Under Control \(PUC\) Programme in Delhi and NCR: Recommendations for improvement to ensure pollution from in-use vehicles is under control](#)

Environment Pollution (Prevention and Control) Authority | April 2017

This report submitted by the Environmental Pollution (Prevention and Control) Authority (EPCA) to Supreme Court on March 24, 2017 has found that existing PUC programmes are not adequate to address the transition to Bharat Stage (BS) VI emission standards, likely to be enforced by 2020

[Air pollution levels rising in many of the world's poorest cities](#)

World Health Organization | May 2016

More than 80% of people living in urban areas that monitor air pollution are exposed to air quality levels that exceed WHO limits reveals WHO.

[A clean air tool for cities](#)

Centre For Science And Environment | Dec 2016

The Centre for Science and Environment developed a dynamic tool to assess the adequacy of air quality management strategies in Indian cities based on some simple but comprehensive set of indicators

[National ambient air quality status & trends – 2012](#)

CPCB | August 2014

This report contains ambient air quality data for the year 2012 with ambient air quality analysis of million plus cities of the country

RELATED WEBSITES

[Central Pollution Control Board \(CPCB\)](#)

[Centre for Science and Environment \(CSE\) – air pollution programme](#)

[Environment Pollution \(Prevention & Control\) Authority for the National Capital Region](#)

[Real-time air quality data- India](#)

STATE OF ENERGY

THERMAL POWER PLANTS

While the country pushes for renewable energy, the clean energy sources are unlikely to replace the polluting thermal power plants. In fact, estimates suggest thermal plant capacity to remain more than 53 per cent in 2021. Despite this, 96 per cent of the upcoming power plants do not have the technology required to meet the latest emission norms issued by the Union environment ministry in 2015, suggests an analysis by non-profit Centre for Science and Environment. The non-profit also suggests that the country should retire old thermal plants that are not just polluting more, but are also financially unsustainable

THERMAL PLANTS ARE HERE TO STAY...

68.3%

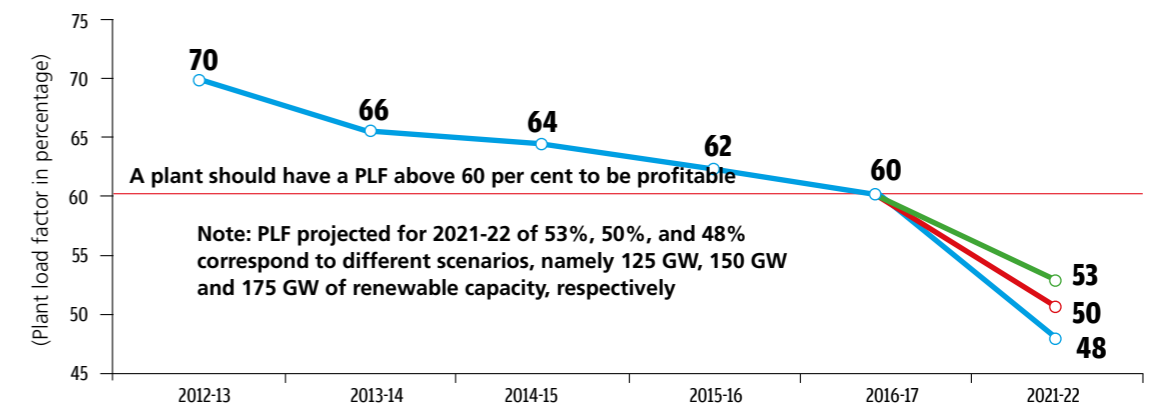
Share of thermal plants in India's total installed capacity in 2017

53.2%

Projected share of thermal plants in India's total installed capacity in 2021

... BUT THEY ARE BECOMING INEFFICIENT

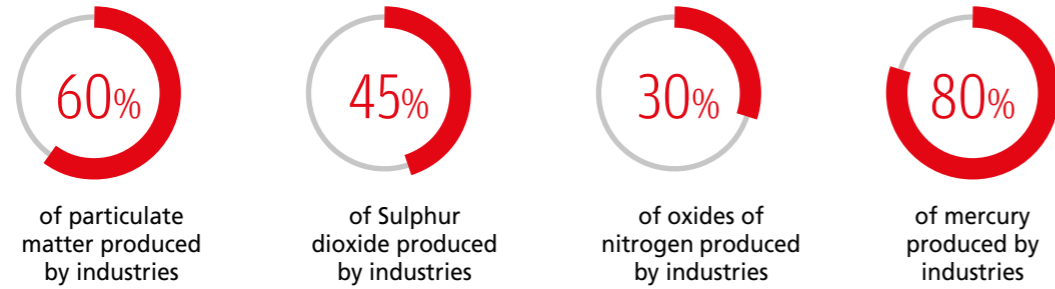
The plant load factor (PLF), a measure of the output of a power plant compared to the maximum output it could produce, is constantly dipping for thermal power plants. A low PLF power project is financially unsustainable



Draft Electricity Policy, Central Electricity Agency, 2016 and Centre for Science and Environment

THERMAL POWER PLANTS NEED TO BE CLEANED

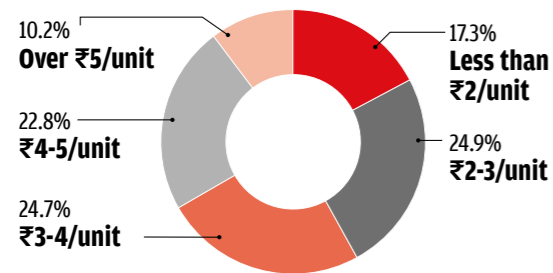
They account for



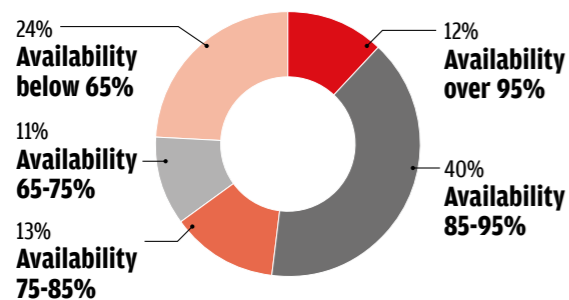
OLD PLANTS SHOULD BE SHUT DOWN

Of the 185 GW of India's coal-based power capacity, 34.3 GW is contributed by plants that have completed their useful life cycle of 25 years. And there are a host of reasons they should be closed down

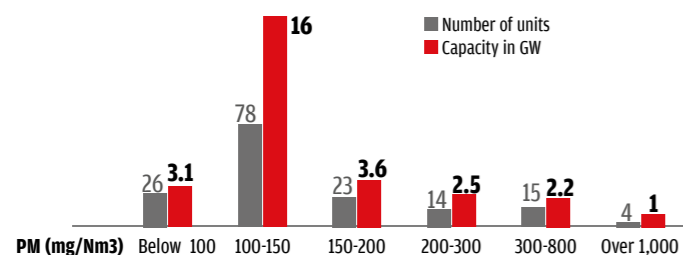
1 Cost of generation | 33 per cent of old plants produce power at over ₹4/unit while the average rate of power produced in India in 2012-13 was ₹3.26/unit



3 Outages | An outage of 15 days/year, or availability of 95 per cent, should be the norm. But a third of the old plants are unavailable for over 25 per cent of the year

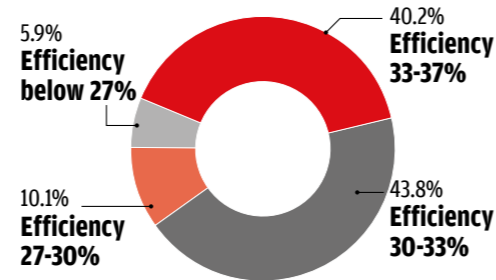


5 High emission | Emission of particulate matter (PM) from 80 per cent of the old units exceeds the new required norm of 100mg/Nm³

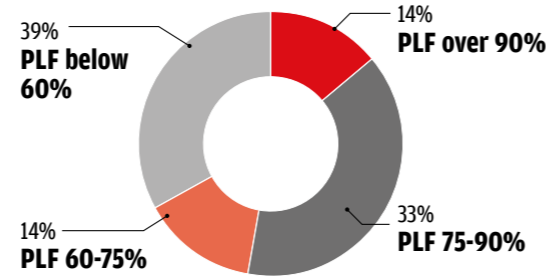


Shutting Old Capacity: The 34-GW Question, CSE, 2016

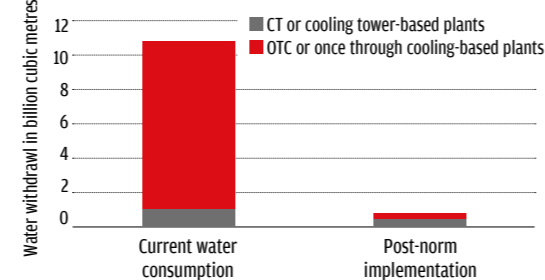
2 Efficiency | The efficiency of almost 60 per cent of old plants is below the national average of 33 per cent



4 Plant load factor (PLF) | A measure of capacity utilisation, this should be at least 60 per cent. But 40 per cent of the old plants do not meet the criterion



6 Water withdrawal | Shutting old plants, a third of which use once-through-cooling (OTC) system, will reduce water consumption by over 90 per cent



SECTOR SHOULD FOLLOW NEW NORMS

The environment ministry in 2015 issued stricter emission norms which can be met if the power plants upgrade or install two equipment technologies*: Electrostatic precipitator and Flue-gas desulfurization. But CSE analysis suggests power plants with a combined capacity of only 3 GW are likely to meet the December 2017 deadline

Year	Electrostatic precipitator	Flue-gas desulfurisation	Total (All figures in GW)
2017	2.4	0.6	3
2018	3.3	1.8	5.1
2019	2.5	3.6	6.1
2020-23	7.1	70.2	77.3
Not specified/other*	19.2	19.7	55.6
Total	34.5	95.9	147.1

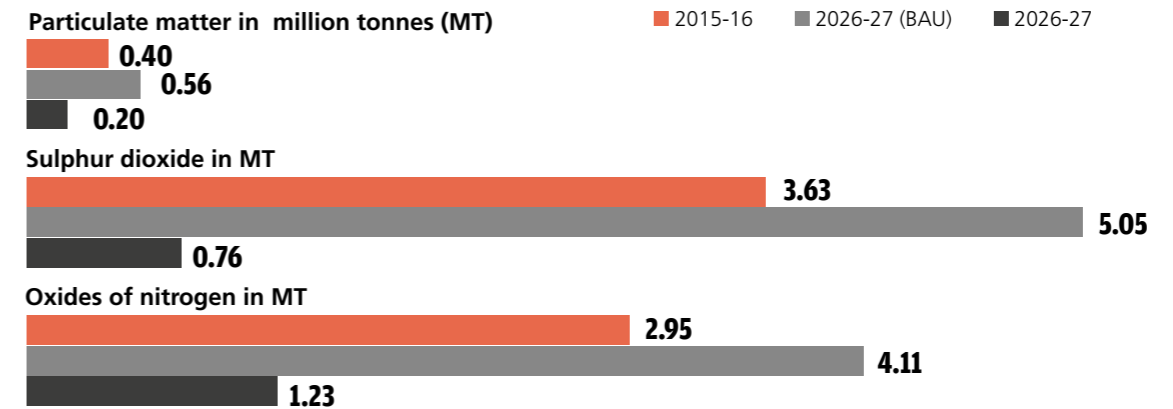
73GW
upcoming coal-based power plants in the country

96%
of the new plants will not meet the new emission norms

*Not specified/other includes plants around 40 GW not covered in plans and those which do not need to upgrade, will retire or for which no recommendation has been made; Source: Regional power committees formed by Central Electricity Agency

GOOD FOR THE CLIMATE

Compared with the business as usual (BAU) scenario, meeting the new environmental norms will result in 65-85 per cent lower emissions by 2026-27



Draft Electricity Policy, Central Electricity Agency, 2016 and Centre for Science and Environment

»»»» MORE ON ENERGY

[Energy statistics 2017](#)

Ministry Of Statistics And Programme Implementation | March 2017

This provides an updated information on reserves, installed capacity, production, consumption, import, export and whole sale prices of different sources viz. coal, crude petroleum, natural gas and electricity

[Draft National Electricity Plan](#)

Central Electricity Authority | Dec 2016

This is the draft electricity plan on Generation for the period 2017 – 2027 focuses on demand/supply of electricity by focusing on energy efficiency, conservation, and demand-side management (DSM) issues

[Key world energy statistics 2016](#)

International Energy Agency | Sep 2016

This report provides data on the supply, transformation and consumption of all major energy sources for the main regions of the world

[Indian Petroleum and Natural Gas Statistics 2015-16](#)

Ministry of Petroleum and Natural Gas | Nov 2016

[Renewable energy prospects for India](#)

International Renewable Energy Agency (IRENA) | May 2017

[Indian wind energy: a brief outlook 2016](#)

Global Wind Energy Council | April 2017

[Global Tracking Framework 2017: progress towards sustainable energy](#)

The World Bank | April 2017

This third edition of the Global Tracking Framework provides an evidence-based look at progress at the regional, country, and international level toward ensuring universal access to modern energy services, doubling the share of renewable energy in the global energy mix, and doubling the global rate of improvement in energy efficiency

[New Environmental Norms for the Power Sector: Proceedings and Recommendations](#)

Centre for Science and Environment | Sept 2016

Government should divert a portion of National Clean Energy Fund (NCEF)—a coal cess of around ₹23,000 crore would be recovered from the power sector in 2016–17—to support installation of pollution control equipment suggests CSE

RELATED WEBSITES

[Ministry of New and Renewable Energy](#)

[Ministry of Power](#)

[Pradhan Mantri Ujjwala Yojana](#)

[National Ujala dashboard](#)

STATE OF EMPLOYMENT

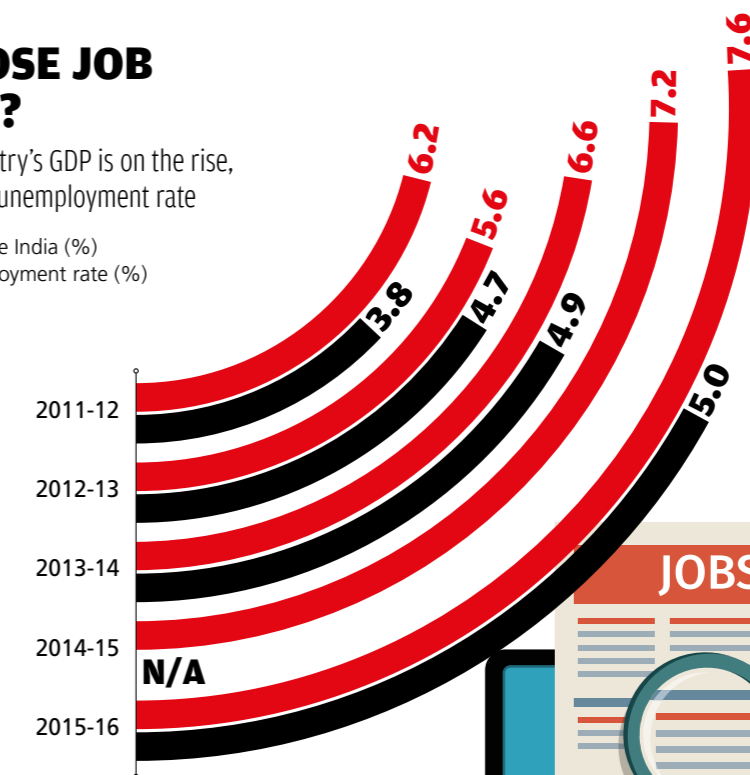
JOBLESS GROWTH

India's economy is growing, but it is not translating into jobs. This is worrying because India is a young country—home to 20 per cent of the world's young population—and a major portion of this young workforce, though educated, is unskilled

WHOSE JOB IS IT?

The country's GDP is on the rise, as is the unemployment rate

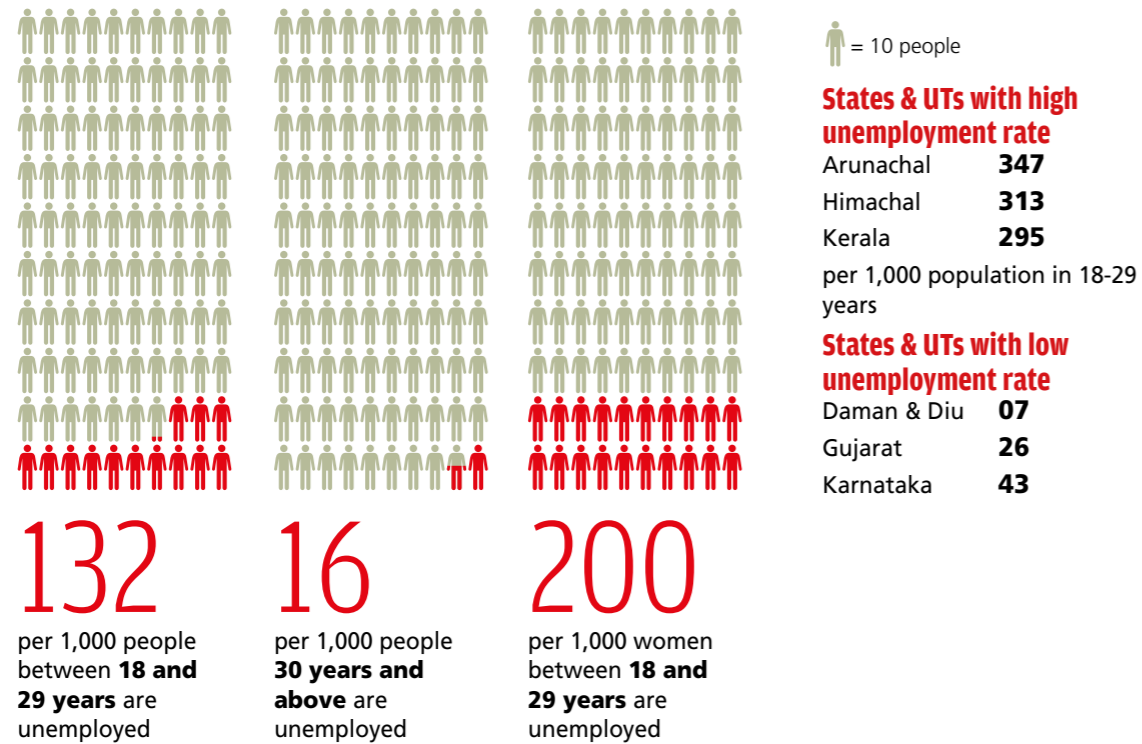
■ GDP rate India (%)
■ Unemployment rate (%)



Report on Fifth Annual Employment - Unemployment Survey (2015-16), Ministry of Labour and Employment Labour Bureau

UNEMPLOYMENT IS A PROBLEM OF THE YOUNG

More than 65 per cent of India's population is below the age of 35. And they are struggling to get jobs



EDUCATED YET JOBLESS

As 12 million young Indians join the workforce every year, it is easier for an illiterate to find a job than a fresh graduate

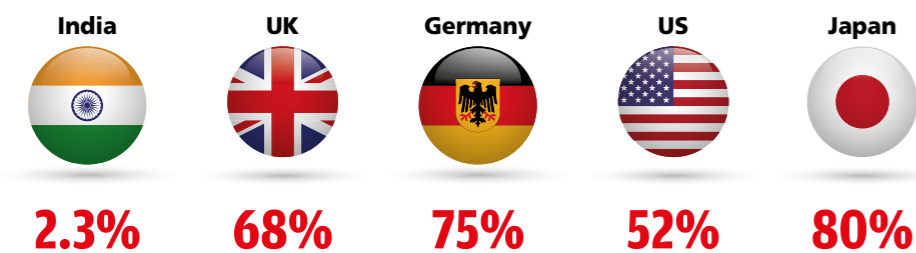


Report on Fifth Annual Employment - Unemployment Survey (2015-16), Ministry of Labour and Employment Labour Bureau

INDIA LARGELY UNSKILLED

India currently faces a severe shortage of well-trained, skilled workers

Population of skilled workforce

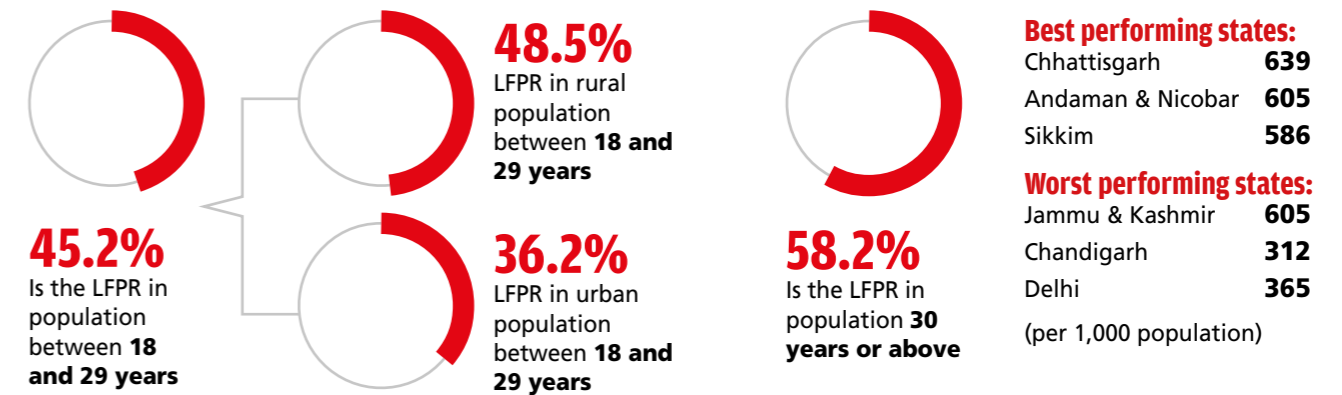


National Skill Development Mission, Government of India

India recently launched the National Skill Development Mission with a target to train at least 300 million people by 2022

IT IS THE OLD WHO ARE STILL WORKING IN A YOUNG INDIA

While more than 58% Indians over 30 years are in the job market, either working or seeking work, the proportion of the young is just 45.2 per cent

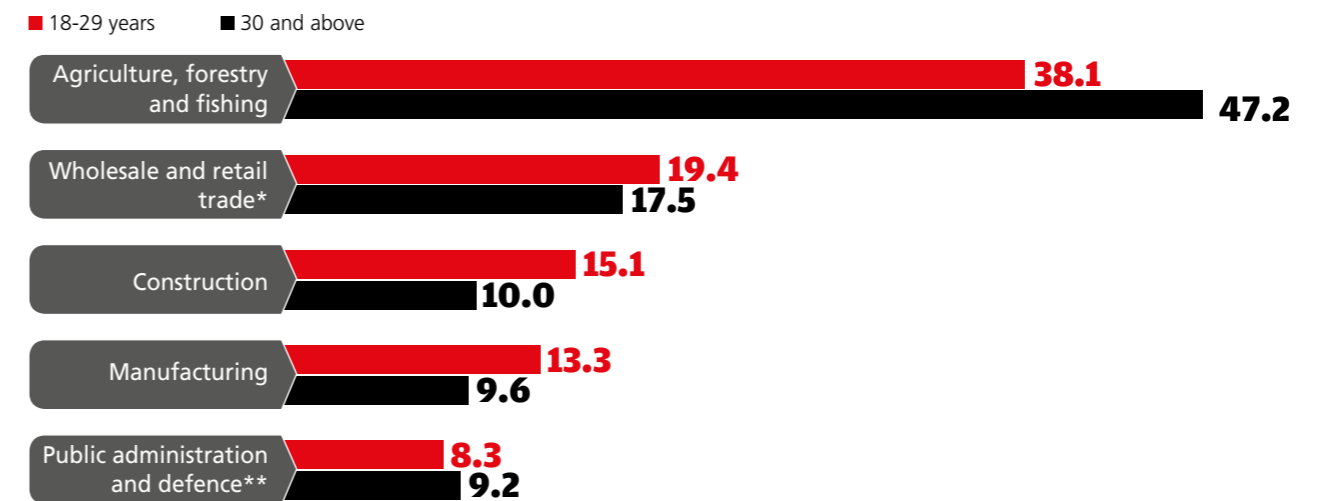


Labour Force Participation Rate (LFPR)

The proportion of the working age population that engages actively in the labour market, either by working or seeking for work. It is an indication of the total labour available in the market

HOW WE ARE EMPLOYED

The farm sector leads, followed by the retail, trade, automobile and IT sectors



*Wholesale and retail trade; repair of motor vehicles and motorcycles + transportation and storage + accommodation and food service activities+ information and communication

**Public administration and defence; compulsory social security+ Education+ Human health and social work activities+ Arts, entertainment and recreation+ Other service activities

India measures the labour force using two different approaches: Usual Principal Status (UPS) and Usual Principal and Subsidiary Status (UPSS). Under UPS, a person is considered part of the labour force if s/he works for 183 days or more in a year. Under UPSS, a person who has worked even for 30 days in a year is considered employed. In this chapter we have used the government figures derived through UPS approach

Report on Fifth Annual Employment - Unemployment Survey (2015-16), Ministry of Labour and Employment Labour Bureau

STATE OF EMPLOYMENT



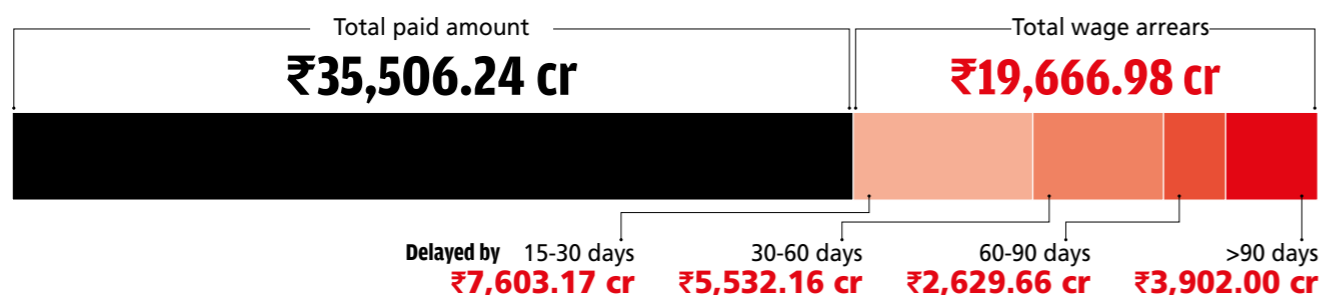
MGNREGA

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is faltering at two levels: delays in wage payment and in the mandatory compensation for the wage delay

WHAT THE SCHEME GUARANTEES ON WAGE PAYMENT

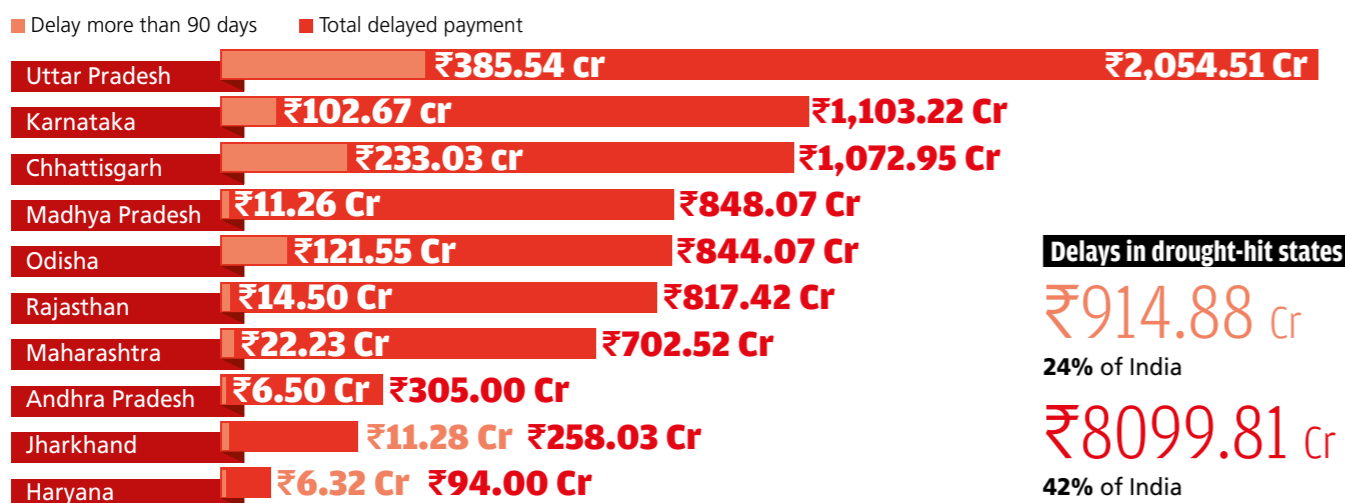
Wages should be paid to workers **within 15 days** of generation of the muster roll

55.4% Payments delayed in 2016-17 | **11%** Payments delayed by over three months in 2016-17



DELAYS IN DROUGHT-PRONE STATES

Wages of close to half of the workers in the drought-hit states got delayed



Delays in drought-hit states

₹914.88 cr
24% of India

₹8099.81 cr
42% of India

MGNREGA COMPENSATION

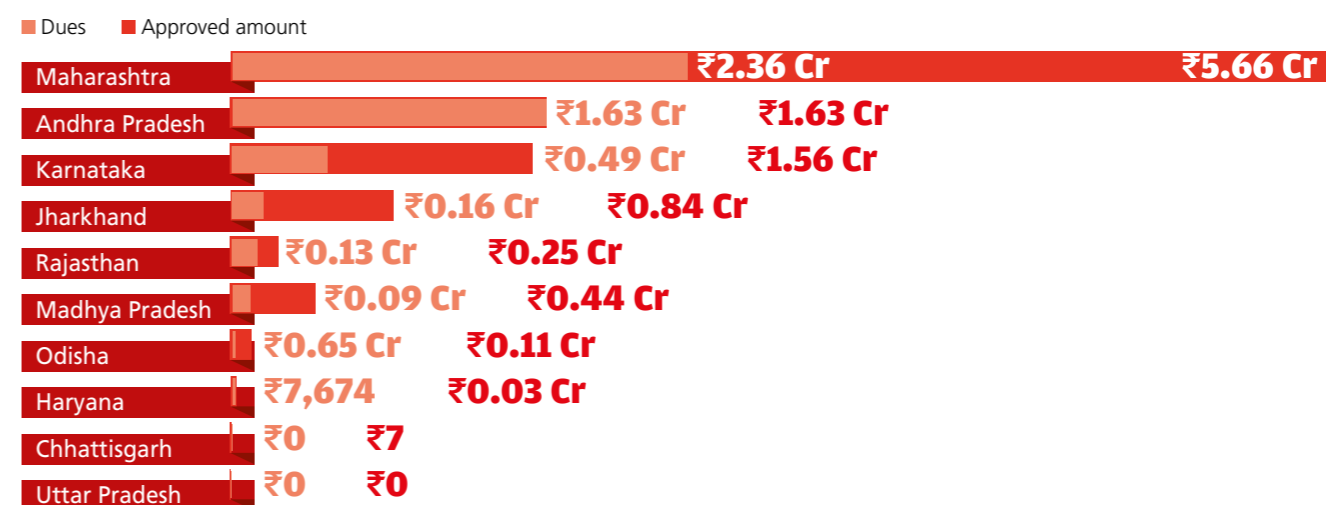
WHAT THE SCHEME GUARANTEES

If the wages is not paid on time, then the workers need to be paid a monetary compensation for **each day of delay till the wages** are deposited into their accounts



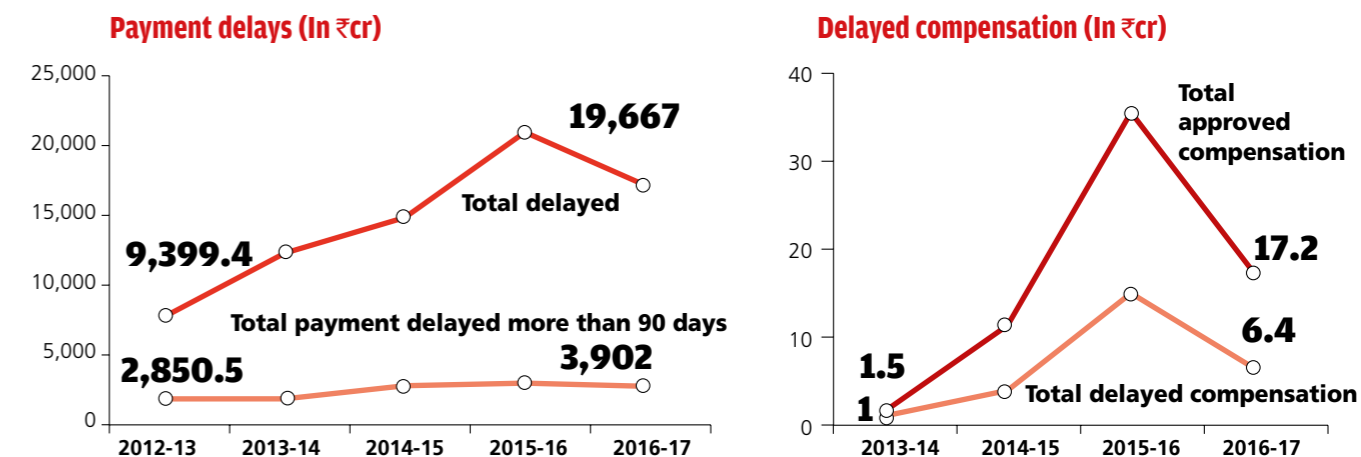
COMPENSATION DELAYS IN DROUGHT-PRONE STATES

Less than half of the approved amount is paid



COMPARISON OF DELAYS IN PAST YEARS

Wage and compensation delays are increasing under the scheme



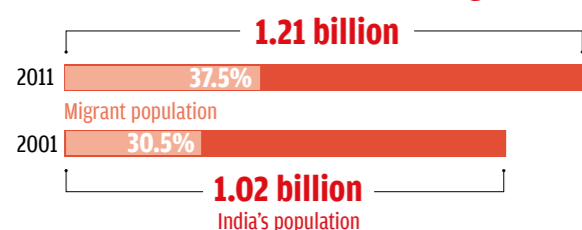
Report on Fifth Annual Employment - Unemployment Survey (2015-16), Ministry of Labour and Employment Labour Bureau

STATE OF EMPLOYMENT

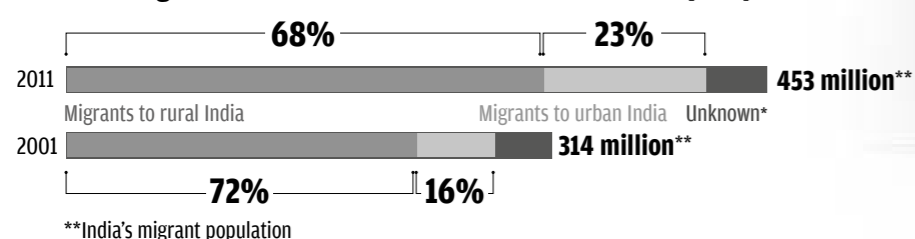
MIGRANT MOVEMENT

Indians are migrating more than ever. While the country's population grew by 17.64 per cent between 2001 and 2011, the migrant population grew by a staggering 44 per cent during the period

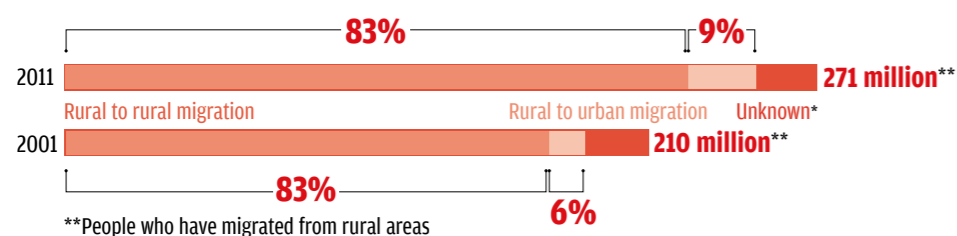
One in every three Indians is a migrant



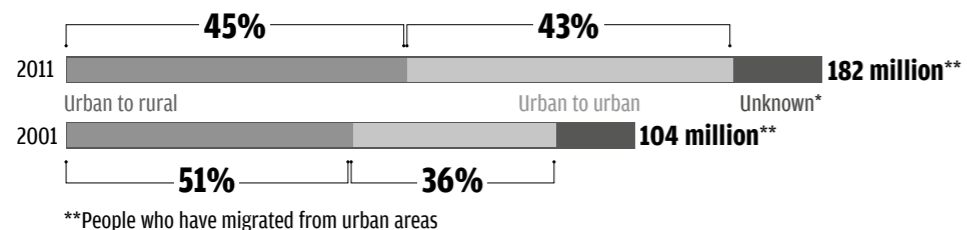
Rate of migration to urban areas has increased rapidly



This is because the rate of rural to urban migration has gone up...



...so has the rate of urban to urban migration



* Destination data not available

Census 2001 and 2011

59 million

The number of people migrating from Uttar Pradesh, the highest in India

58 million

The number of people migrating for work, business and education

Where they moved

Southern and northeastern states have registered the maximum rate of increase in migrant population

Top states having the highest migrant growth rate			
State	2001 (million)	2011 (million)	Growth (%)
Meghalaya	0.37	0.77	108
Tamil Nadu	15.82	31.33	98
Manipur	0.37	0.73	97
Kerala	9.19	16.33	77
Jammu and Kashmir	1.81	2.83	55
Assam	6.79	10.15	52
Karnataka	16.56	25	51
Andhra Pradesh	23.46	33.15	42
India	314.54	453.64	44

Why they moved

While social factors continue to be the primary cause for migration, a growing number of people are migrating for economic reasons too

Reasons	2001 (million)	2011 (million)	Growth (%)
Work	30	46	53
Business	3	4	33.33
Education	3	8	166.67
Marriage	156	224	43.59
Moved after birth	16	48	200
Moved with household	43	70	62.79
Other reasons	64	53	-17.18



From State of India's Environment in figures 2016

MGNREGA: Average wage

₹65/day in 2006

₹150/day in 2015

Women participation

40% in 2007

57% in 2015

[Get your copy of SoE in Figures 2016](#)

»»»» MORE ON EMPLOYMENT

[Institutional versus non-institutional credit to agricultural households in India](#)

International Food Policy Research Institute | March 2017

This paper investigates the impact of institutional credit on farm income and household consumption expenditures

[Mahatma Gandhi National Rural Employment Guarantee Act: The Journey of a Decade](#)

Ministry of Rural Development | Feb 2016

A report card of MGNREGA's performance in the past ten years

[Report on Mahatma Gandhi National Rural Employment Guarantee Audit of Scheme Rules, 2011 \(Social Audit Rules\)](#)

Comptroller And Auditor General Of India | April 2016

It is the audit report of the scheme

[Report on Fifth Annual Employment – Unemployment Survey \(2015-16\) -Vol I](#)

Ministry of Labour and Employment | Sep 2016

This volume deals with important parameters namely Labour Force Participation Rate, Worker population Ratio, Unemployment Rate based on Usual Principal Status Approach and Usual Principal & Subsidiary Status Approach, distribution of employed persons by different activity, extent of underemployment etc

[Youth Employment-Unemployment Scenario 2015-16](#)

Ministry of Labour and Employment | Sep 2016

This volume deals with Labour Force Participation Rate, Worker Population Ratio, Unemployment Rate etc. for different age groups viz. 15-17 years, 18-29 years and 30 Years & above

[Education, Skill and Labour Force 2015-16](#)

Ministry of Labour and Employment | Sep 2016

This volume deals with vocational training and main activity pursued, educational level and main activity, type of formal and non-formal training attained etc

RELATED WEBSITES

[Mahatma Gandhi National Rural Employment Guarantee Act](#)

[Ministry of Rural Development](#)

[Labour Bureau, Ministry of Labour and Employment](#)

[Pradhan Mantri Kaushal Vikas Yojana, Ministry of Skill Development & Entrepreneurship](#)

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Down To Earth is one of the most credible instruments of public journalism in India, which has been decoding the politics of development, environment and health for the past 25 years. Numerous readers across the world rely on DTE for a comprehensive view from the South on the most critical issues of human survival. Centre for Science and Environment is a global think tank from the South for research and advocacy on inclusive green growth



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