

# JHARKHAND STATE SUSTAINABLE DEVELOPMENT REPORT - 2022

AN OVERVIEW OF PERFORMANCE AND ROADMAP FOR FUTURE





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The Jharkhand State Sustainable Development Goals Report 2022 provides an overview of progress on implementing the 2030 Agenda for Sustainable Development using the latest available data and estimates. It tracks the sector-specific progress towards the 17 Goals with analyses of selected indicators for each Goal. The views expressed in this report are those of the authors, and they do not necessarily reflect the views and policies of the Government of Jharkhand. The data quoted in the report has been furnished by PLF and all efforts have been made to verify it. PLF is not able to guarantee the accuracy of the data included in this report and accepts no responsibility for the same.

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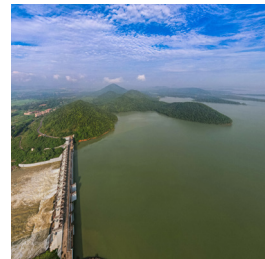
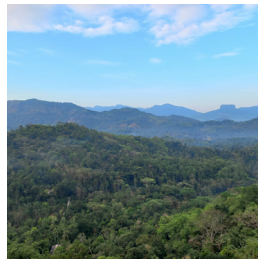
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## Acknowledgements

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This report stands as a testament to the hard work and commitment of all involved and will be an essential tool in driving the progress of Jharkhand towards the attainment of the SDGs. We hope it will be a source of inspiration and a call to action for all stakeholders.



# Message from Chief Minister



# Message from Chief Secretary



# Message from Principal Secretary



# Message from Joint Secretary





# Message from Unicef Chief

# List of Abbreviations

<b>AAJ</b>	Antyodaya Anna Yojana
<b>AB-PMJAY</b>	Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana
<b>AGYW</b>	Adolescent Girls and Young Women
<b>AIDS</b>	Acquired Immunodeficiency Syndrome
<b>AISHE</b>	All India Survey on Higher Education
<b>AMRUT</b>	Atal Mission For Rejuvenation And Urban Transformation
<b>ANER</b>	Adjusted Net Enrolment Ratio
<b>ANM</b>	Auxiliary Nurse and Midwife
<b>ASHA</b>	Accredited Social Health Activist
<b>ATM</b>	Automated Teller Machine
<b>AWC</b>	Anganwadi Centres
<b>AYUSH</b>	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
<b>BAU</b>	Business As Usual
<b>BC</b>	Backward Caste
<b>BMI</b>	Body Mass Index
<b>BMW</b>	Bio Medical Waste
<b>BP</b>	Block Panchayat
<b>BPL</b>	Below Poverty Line
<b>CAMPA</b>	Compensatory Afforestation Fund Management and Planning Authority
<b>CB&amp;T</b>	Capacity Building and Training
<b>CMIE</b>	Centre for Monitoring Indian Economy
<b>CO2</b>	Carbon Dioxide
<b>COVID-19</b>	Coronavrus Disease 2019
<b>CPCB</b>	Central Pollution Control Board
<b>CPHS</b>	Consumer Pyramid Household Survey
<b>CPL</b>	Commercial Pilot License
<b>CRF</b>	Central Road Investment Fund
<b>CWSN</b>	Children with Special Needs
<b>DALY</b>	Disability Adjusted Life Years
<b>DAP</b>	Diammonium phosphate
<b>DBT</b>	Direct Benefit Transfer
<b>DDUGJY</b>	Deen Dayal Upadhyay Gram Jyoti Yojana
<b>DNT</b>	Denotified Tribe
<b>DoE</b>	Department of Education
<b>DWS</b>	Drinking Water and Sanitation
<b>EAG</b>	Empowered Action Group
<b>EAP</b>	Externally Aided Projects
<b>EBC</b>	Economically Backward Class
<b>EMRS</b>	Eklavya Model Residential School
<b>EODB</b>	Ease Of Doing Business
<b>FCA</b>	Forest Conservation Act
<b>FDI</b>	Foreign direct investment
<b>FI</b>	Financial Inclusion
<b>FRH</b>	Forest Rest House
<b>FRU</b>	First Referral Units
<b>FY</b>	Financial Year
<b>GDP</b>	Gross Domestic Product

<b>GER</b>	Gross Enrolment Ratio
<b>GHG Emission</b>	Greenhouse Gas Emmission
<b>GHI</b>	Global Hunger Index
<b>GIS</b>	Geographic Information System
<b>GoJ</b>	Government of Jharkhand
<b>GP</b>	Gram Panchayat
<b>GPDP</b>	Gram Panchayat Development Plan
<b>GPI</b>	Gender Parity Index
<b>GSDP</b>	Gross State Domestic Product
<b>GSVA</b>	Gross State Value Added
<b>GVA</b>	Gross Value Added
<b>GWh</b>	Gigawatt hours
<b>Hb</b>	Haemoglobin
<b>HH</b>	Household
<b>HIV</b>	Human Immunodeficiency Virus
<b>ICDS</b>	Integrated Child Development Department
<b>ICT</b>	Information and Communication Technology
<b>IFA</b>	Iron and Folic Acid
<b>IFSR</b>	India State of Forest Report
<b>IGNDPS</b>	Indira Gandhi National Disability Pension Scheme
<b>IHL</b>	Individual Household Latrines
<b>IMR</b>	Infant Mortality Rate
<b>IPC</b>	Indian Penal Code
<b>IPD</b>	In Patient Department
<b>IT</b>	Information and Technology
<b>ITES</b>	Information Technology Enabled Services
<b>ITI</b>	Industrial Training Institute
<b>JBVNL</b>	Jharkhand Bijli Vitran Nigam Limited
<b>JFMC</b>	Joint Forest Management Committee
<b>JharNet</b>	Jharkhand State Information and Communication Network
<b>JIP</b>	Jharkhand Industrial Policy
<b>JJM</b>	Jal Jeevan Mission
<b>JREDA</b>	Jharkhand Renewable Energy Development Agency
<b>JSAC</b>	Jharkhand Space Applications Center
<b>JUSNL</b>	Jharkhand Urja Sancharan Nigam Limited
<b>KLD</b>	Kilo Liters per Day
<b>LEADS</b>	Logistics Ease Across Different States
<b>LED</b>	Light-Emitting Diode
<b>LFPR</b>	Labour Force Participation Rate
<b>LPG</b>	Liquefied Petroleum Gas
<b>LSB</b>	Long-Span Bridges
<b>MDI</b>	Micro Drip Irrigation
<b>MFP</b>	Minor Forest Produce
<b>MGDs</b>	Millennium Development Goals
<b>MGNREGA</b>	Mahatma Gandhi National Rural Employment Gurantee Act
<b>MMR</b>	Maternal Mortality Ratio
<b>MOP</b>	Muriate Of Potash

# List of Abbreviations

<b>MPCE</b>	Monthly Per capita Consumption Expenditure
<b>MPI</b>	Multidimensional Poverty Index
<b>MSME</b>	Ministry of Micro, Small and Medium Enterprises
<b>MSP</b>	Minimum Support Price
<b>MSW</b>	Municipal Solid Waste
<b>MU</b>	Million Units
<b>MW</b>	Megawatt
<b>NA</b>	Not Applicable
<b>NAAC</b>	National Assessment and Accreditation Council
<b>NAEB</b>	National Afforestation and Eco Development Board
<b>NAP</b>	National Afforestation Program
<b>NBFC</b>	Non-Bank Financial Institution
<b>NCD</b>	Non-Communicable Disease
<b>NFHS</b>	National Family Health Survey
<b>NFSA</b>	National Food Security Act
<b>NGO</b>	Non-Government Organisation
<b>NHE</b>	Nutrition and Health Education
<b>NITI Aayog</b>	National Institute for Transforming India
<b>NPA</b>	Non-Performing Assets
<b>NPKS</b>	Nitrogen, Phosphorus and Pottasium
<b>NQAS/LaQshya</b>	National Quality Assurance Standard / Labour room & Quality Improvement Initiative
<b>NRHM</b>	National Rural Health Mission
<b>NSDP</b>	Net State Domestic Product
<b>NSS</b>	National Sample Survey
<b>NUHM</b>	National Urban Health Mission
<b>NULM</b>	National Urban Livelihood Mission
<b>OBC</b>	Other Backward Class
<b>ODF</b>	Open Defecation Free
<b>OOPME</b>	Out Of Pocket Medical Expenditure
<b>OPD</b>	Out Patient Department
<b>PCR</b>	The Protection of Civil Rights
<b>PG</b>	Post Graduation
<b>PhD</b>	Doctor of Philosophy
<b>PHH</b>	Priority Household
<b>PLFS</b>	Periodic Labour Force Survey
<b>PM AJAY</b>	Pradhan Mantri Anusuchit Jaati Abhyuday Yojana
<b>PM-YASASVI</b>	PM Young Achievers' Scholarship Award Scheme for vibrant India for OBC, EBC and DNT
<b>PMAGY</b>	Pradhan Mantri Adarsh Gram Yojana
<b>PMAY</b>	Pradhan Mantri Awas Yojana
<b>PMGKP</b>	Pradhan Mantri Garib Kalyan Package
<b>PMGSY</b>	Pradhan Mantri Gram Sadak Yojana
<b>PMJAY</b>	Pradhan Mantri Jan Aarogya Yojana
<b>PMJDY</b>	Pradhan Mantri Jan Dhan Yojana
<b>PMKSY</b>	Pradhan Mantri Krishi Sinchayee Yojana
<b>PMMVY</b>	Pradhan Mantri Matru Vandana Yojana
<b>PMU</b>	Project Monitoring Unit
<b>PNG</b>	Piped Natural Gas

<b>PPE</b>	Personal protective equipment
<b>PRI</b>	Panchayati Raj Institution
<b>PSU</b>	Public Sector Undertaking
<b>PTR</b>	Pupil Teacher Ratio
<b>PTTC</b>	Primary Teachers Training Course
<b>PVTG</b>	Particularly Vulnerable Tribal Group
<b>PWD</b>	Person with disability
<b>PWS</b>	Pipe Water Supply
<b>RCPLWEA</b>	Road Connectivity Project for Left Wing Extremism Affected Areas
<b>RCS</b>	Regional Connectivity Scheme
<b>RDA</b>	Regional Development Authority
<b>RGPSA</b>	Rajiv Gandhi Panchayat Sashaktikaran Abhiyaan
<b>RGSA</b>	Rashtriya Gram Swaraj Abhiyan
<b>RIMS</b>	Rajendra Institute of Medical Sciences
<b>RSW</b>	Regular Salaried Wage
<b>RT-PCR</b>	Reverse Transcription Polymerase Chain Reaction
<b>SAG</b>	Scheme for Adolescent Girls
<b>SBM(G)</b>	Swachh Bharat Mission-Gramin
<b>SC</b>	Scheduled Caste
<b>SCDC</b>	Scheduled Castes Development Corporation
<b>SDG</b>	Sustainable Development Goal
<b>SEP</b>	Self Employment Program
<b>SHG</b>	Self Help Group
<b>SHRAMIK</b>	Shahri Rozgar Manjuri for Kamgar
<b>SICDP</b>	Small Industries Cluster Development Programme
<b>SNCU</b>	Special Newborn Care Unit
<b>SPV</b>	Special Purpose Vehicle
<b>SSC</b>	Secondary School Certificate
<b>ST</b>	Scheduled Tribe
<b>THP</b>	Targeting the Hard-Core Poor
<b>TRIPS Agreement</b>	The Agreement on Trade-Related Aspects of Intellectual Property Rights
<b>U5MR</b>	Under 5 Mortality Rate
<b>UDAN</b>	Ude Desh ka Aam Naagrik
<b>UDISE</b>	Unified District Information System for Education
<b>UG</b>	Under Graduation
<b>ULB</b>	Urban Local Body
<b>UN</b>	United Nations
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UT</b>	Union Territory
<b>VLCC</b>	Village Level Convergence Committee
<b>WFPR</b>	Work Force Participation Rate
<b>WHO</b>	World Health Organisation
<b>WHO FCTC</b>	World Health Organisation Framework Convention on Tobacco Control
<b>ZP</b>	Zilla Panchayat

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## An overview of the status of Sustainable Development Goals in Jharkhand

The Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations in 2015 to end poverty, protect the planet, and ensure prosperity for all by 2030. These goals are relevant to all countries, including India, which has recognized the importance of sustainable development and has made efforts to integrate the SDGs into its policies and programs. In India, the SDGs are seen as a roadmap for inclusive and sustainable development. The country has made significant progress in reducing poverty, improving health and education, and increasing access to energy and sanitation. However, there are still significant challenges to be addressed, such as inequality, environmental degradation, and lack of access to basic services. The SDGs provide a framework to address these challenges and promote sustainable development in India.

The report focuses on integrating the SDGs into the development Action Plan for the State of Jharkhand. The report uses the SDG India Index 3.0 (NITI Aayog, 2021) as a base for analysis to give significant insights into the current status to identify critical gaps in improving the overall performance of key indicators of the state. The report on the performance of the Sustainable Development Goals (SDGs) in the state of Jharkhand is divided into three categories based on the SDG India Index: Front Runner, Performer, and Aspirant. The categories reflect the level of progress made by the state towards achieving the SDGs. The “Achiever” category has not been used in this report as it is not applicable to the state of Jharkhand. This categorization provides a comprehensive overview of the state’s progress towards the SDGs and highlights the areas that need improvement.

Moreover, it analyses the existing schemes and indicators for Jharkhand as against India and the National targets, to suggest policy changes and monitoring methods to improve the performance. Along with this, the document also analyses the Compound Annual Growth Rate (CAGR) with the target of 2030, as per United Nations, for the aspirant goals to understand the trends and suggest policy measures over time.

The findings of the analysis of the state of Jharkhand’s performance in terms of the Sustainable Development Goals (SDGs) show that it ranks 27th among all states in the country. Although the state is a front runner in many of the goals, its overall performance is ranked among the lowest-ranking states due to its poor performance in achieving other goals. To improve its performance, the state government has implemented various schemes and programs, such as promoting sustainable agriculture practices, reducing maternal and child mortality rates, and improving access to healthcare.

However, the analysis reveals that the state still has a long way to go to reach its set targets. It needs to focus on reducing poverty levels and improving the quality of life for its citizens. Despite efforts by the government, the state still faces major challenges in food security and related health indicators such as, young children who are underweight, stunting, and anaemia among young girls and women (SDG 2). In addition, the state needs to improve its education system, which is the focus of SDG 4. Climate action (SDG 13) and the manufacturing sector (SDG 9) are also areas that need improvement. Overall, the analysis highlights the need for further efforts by the state government and other stakeholders to improve the state’s performance in achieving the SDGs.

For this, the government of Jharkhand needs to take immediate steps to improve the state’s performance in various areas related to the SDGs. Improving poverty, ending hunger and malnutrition, and improving education are crucial for the overall development and progress of the state. The report is a useful tool for policymakers, stakeholders, and the general public to understand the state’s progress towards sustainable development.



# Related Policy Suggestions for All Sustainable Development Goals

## Frontrunner category



**SDG 3:** Ensure healthy lives and promote wellbeing for all at all ages

Composite score: 74

**Policy messages:**

- Strengthening ICDS mother and child care, immunization and nutrition and reduce infant mortality,
- Encourage health insurance schemes and improve coverage,
- Ensure strengthening the frontline health systems and functionaries to expand the outreach.



**SDG 6:** Ensure availability and sustainable management of water and sanitation for all.

Composite score: 86

**Policy messages:**

- Immediate focus on scaling up and strengthening the implementation of Jal Jeevan Mission and bring maximum household under coverage of piped drinking water.
- Strengthening the primary irrigation in the state ensuring sustainable watershed management and groundwater recharging,



**SDG 7:** Ensure access to affordable, reliable, sustainable and modern energy for all.

Composite score: 71

**Policy messages:**

- Ensure 100% households with LPG/PNG connections,
- Expand the coverage of Pradhan Mantri Ujjwala Yojana,



**SDG 10:** Reduce inequality within and among countries

Composite score: 65

**Policy messages:**

- Strengthen the implementation of Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989.



**SDG 11:** Make cities and human settlements inclusive, safe, resilient and sustainable

Composite score: 79

**Policy messages:**

- Strengthen the drainage and water management systems and ensure expanded outreach.



**SDG 15:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Composite score: 71

**Policy messages:**

- Improve the implementation of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) and strengthen the integrated watershed management systems (State Watershed Mission).



**SDG 16:** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable, and inclusive institutions at all levels.

Composite score: 71

**Policy messages:**

- Strengthening the systems within the policy system to zero down human trafficking (including women and children).

## Performer category

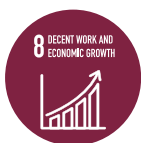


**SDG 5:** Achieve gender equality and empower all women and girls

Composite score: 51

**Policy messages:**

- Strengthening and expanding the outreach of women empowerment programs, specifically Self Help Groups, Mahila Sakthi Kendras, Swadhar Greh Scheme, Tejiswani project and Mukhya Mantri Kanyadan Yojana, Mukhyamantri Sukanya Yojana.
- Strengthen the health systems to ensure 100% coverage of adolescent girls under IFA consumption.



**SDG 8:** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Composite score: 54

**Policy messages:**

- Strengthening and expanding outreach under MGNREGS is essential with more focus on Mukhyamantri Shramik Yojna.



**SDG 12:** Ensure sustainable consumption and production patterns

Composite score: 55

**Policy messages:**

- Increase resource allocation to Swachh Bharat Mission (Urban & Rural) and ensure quality outreach.
- Encourage private sector to manage hazardous and biomedical water management.

## Aspirant category



**SDG 1:** End Poverty in all its forms everywhere

Composite score: 36

**Policy messages:**

- Strengthen the food security programs
- Encourage skill development and vocational skill trainings and ensure linkages between job market and skill development
- Expand the outreach of MGNREGS
- Re-vitalize Pradhan Mantri Matru Vandana Yojana, and Pradhan Mantri Matru Vandana Yojana and ensure proper coverage.



**SDG 2:** End hunger, achieve food security, improve nutrition, and promote sustainable agriculture

Composite score: 19

**Policy messages:**

- Essential to focus on sustainable food security and improve the nutrition intake among women and children.
- Promote sustainable agricultural systems to ensure food security to all categories of people.



**SDG 4:** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Composite score: 45

**Policy messages:**

- Vocational skills/job oriented skill programs has to be included in the on-going curriculum at graduation level.
- Exploring the possibilities of partnering with international universities and agencies which are pioneers in vocational skill building and linking with job market.



**SDG 9:** Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Composite score: 37

**Policy messages:**

- More investments and focus on horticulture, sericulture and handicraft sectors in the state. It helps in generating more employment and economic status of the state.
- Manufacturing sector needs to be strengthen with innovative models and market linkages.
- More focus on IT related infrastructure is essential.



**SDG 13:** Take urgent action to combat climate change and its impact.

Composite score: 25

**Policy messages:**

- Include disaster management, including resilience in the state disaster management plan and strengthen the implementation under action plan.



# Sustainable Development Goals

The 17 Sustainable Development Goals (SDGs) with 169 targets are the world's best plan to build a better world for people and our planet by 2030. Adopted by all United Nations Member States in 2015, the SDGs are a call for action by all countries - poor, rich and middle-income - to promote prosperity while protecting the environment. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address a range of social needs including education, health, equality and job opportunities, while tackling climate change and working to preserve our ocean and forests.

India is critical in determining the success of the SDGs globally. NITI Aayog, the Government of India's premier think tank, has been tasked with coordinating the SDGs, mapping schemes related to the SDGs and their targets, and identifying lead and supporting ministries for each target. In addition, the Ministry of Statistics and Programme Implementation (MoSPI) has been leading discussions to develop SDG national indicators. State governments are critical to India's SDG progress as they are best placed to 'put people first' and to ensure that no one is left behind'.

## Jharkhand – 'The Land of Forests'

Jharkhand is an ecologically rich state and home to one of the wealthiest mineral resources in the country. The state is landlocked and enjoys a unique location advantage by being in proximity to the vast markets of Eastern India. Mining and mineral reserves extraction are the major industries in the state. With more than one-fourth of the state having forest cover, it plays an integral part in the economy, followed by industrial growth. Almost 80% of the state's rural population depends on agriculture, with rice being the principal crop grown in the state.

Nearly two-fifths of the population of Jharkhand are indigenous people classified as Scheduled Tribes (ST) and Scheduled Castes (SC). With just one-tenth of the population classified as urban, Jharkhand remains one of India's most rural states. Jharkhand's Chhota Nagpur plateau is one of the richest mineral belts in India. The state is also home to large industrial establishments offering prospective investors numerous employment opportunities and a favourable economic climate.

## Sustainable Development Goals and Jharkhand

Among all the states in the SDG India Index (2020-21), Jharkhand is ranked as a frontrunner (50-64). It has achieved a composite SDG score of 56. The following is the performance of Jharkhand on each of the goals.

State government has made certain strategic arrangements to achieve or to reach near to the targets by 2030 – constituting high power committee headed by the Chief Secretary with all departments heads as members. It has taken four pillar approach:

**Pillar 1:** Creating institutional ownership: The Department of Planning and Finance is the nodal institution. An SDG Unit, established with the support of UNICEF, provides technical inputs. The State Development Council is the apex body for formulation of the overall development roadmap.

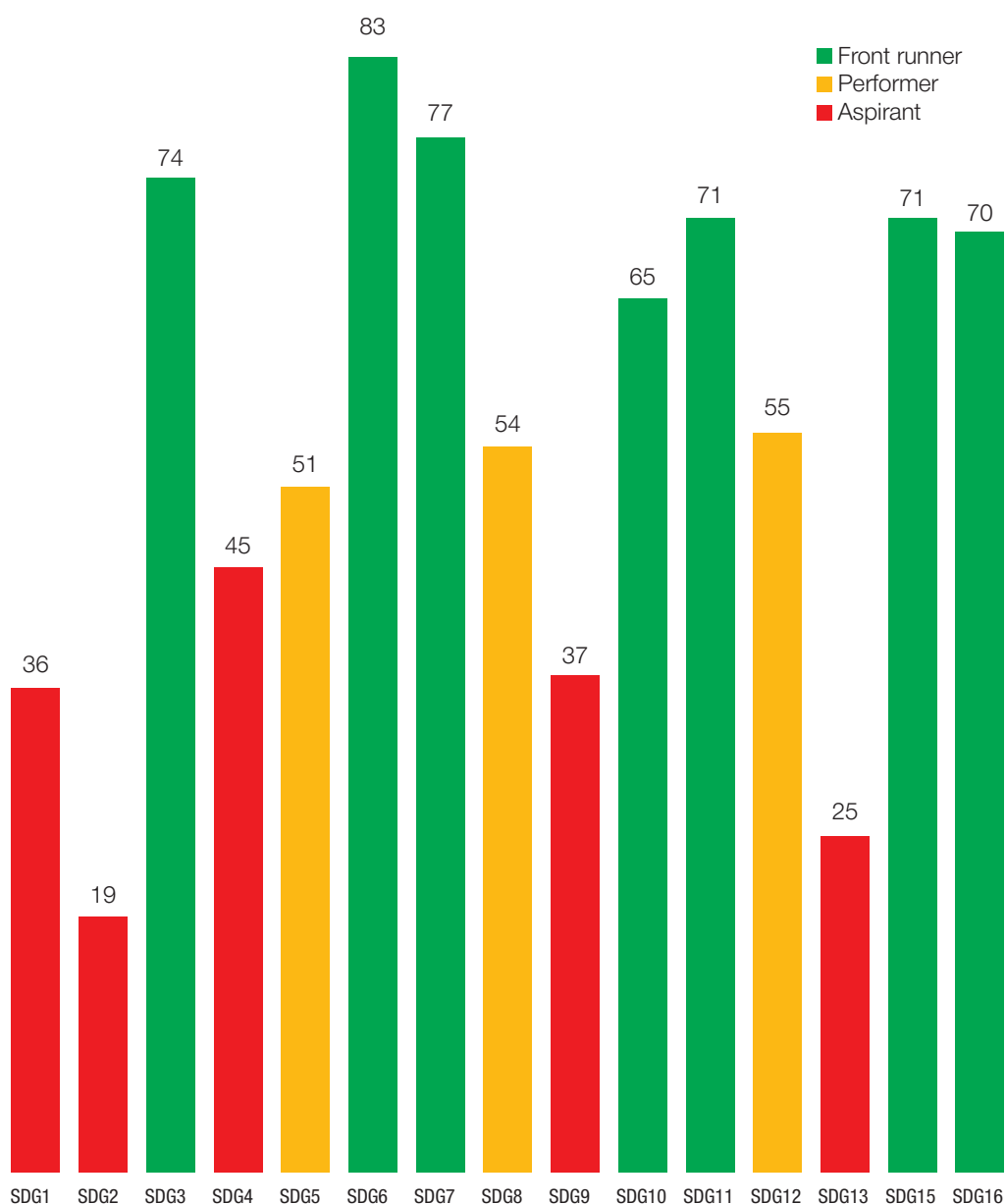
**Pillar 2:** Establishing robust review and monitoring systems: The progress on SDGs is reviewed at the level of the Chief Secretary or the Chief Minister. The state has shortlisted 253 indicators for the State Indicator Framework. The SDG unit is in the process of compilation of the District Indicator Framework.

**Pillar 3:** Developing capacities for integrating the SDGs in Planning and Monitoring: State has undertaken a number of initiatives for sectoral capacity building. Training and capacity building sessions on the SDGs have been conducted for different levels of state government officials in collaboration with NITI Aayog and the UN agencies at periodic intervals.


**Pillar 4:** Adopting a “whole-of-society” approach: State has partnered with UNICEF, which assists the state in facilitating SDG-related sectors. An SDG unit has been set up with the support of UNICEF. Various departments are working with other UN agencies, the World Bank, and the private sector.

The state of Jharkhand is committed to integrating SDGs into its annual action plans. It adopted a citizen-centric approach to implement the SDGs and has developed the state vision document and three-year action plan in alignment with the SDGs. Among all the states in the SDG India Index (2020-21), Jharkhand is ranked as a performer (50-64). It has achieved a composite SDG score of 56. The following is the performance of Jharkhand on each of the goals.

**Figure 1:** Performance of Jharkhand on each SDG



Source: NITI Aayog, India SDG Index, 2021



Based on the financial, environment and citizen-centric issues pertaining to the State, the Government of Jharkhand has outlined its major goals for achieving the targets of the SDG. The following are the goals outlined by the state:

1. Rural Prosperity and Improved Quality of Life
2. Improved Urban Living
3. Access to Quality Education
4. Access to Safe Drinking Water and Sanitation
5. Women Empowerment and Child Protection
6. Doubling Farmers' Income
7. Skilled Workforce and Growing Entrepreneurship
8. Enabling Access to Energy
9. Universal, Affordable and Quality Healthcare Services
10. Enhancing Transport Connectivity
11. Inclusive growth
12. Sustainable and Employment Oriented Industrial Development
13. Sustainable Forest Management
14. Convergent Policy and Action Plan
15. Efficient and Effective Governance

The performance of Jharkhand on each of the SDGs is discussed in detail in the following sections

# Methodology

## 2.1 Indicators and Data Collection

The introductory sections of the study are based on a comprehensive literature review conducted in multiple stages. The first stage involved a thorough examination of recent research, literature, and expert guidelines related to the Sustainable Development Goals (SDGs). This was followed by a critical analysis of recent experiences in Jharkhand state SDG implementation to identify critical gaps, using available national and state reports, including the SDG India Index 3.0 (NITI Aayog, 2021).

A total of 121 indicators across 15 goals have been considered for this report. The indicators under each goal are taken in line with the India NITI Aayog SDG index. It analyses the existing schemes and performance indicators for each goal to analyse the socio-economic performance of the state as against the National targets. The report draws on data obtained through primary data collection from the various department and secondary sources including, the Jharkhand Economic Survey (2021-22), NFHS, CNNS, UDISE+, PLFS, MIS data from the website, articles and reports on Jharkhand's growth. The list of the indicators against each goal has been attached in Appendix II, which can serve as a guide to data collection initiatives in the future and allow a better evaluation of the SDG index in Jharkhand.

**The objectives of this report are:**

- 01** To analyse the existing status of SDG goals
- 02** Identify the current growth rate and estimated growth rate for the aspirant goals to reach the Achiever category
- 03** Identify critical gaps and challenges in the performance of each goal and suggest suitable policy measures

## 2.2 About the Projections Calculation

The SDG Index data structure analysis reveals that the Compound Annual Growth Rate (CAGR) is the best method to evaluate a state's progress towards achieving the United Nations' sustainable development goals (SDGs) by 2030. The document focuses on the analysis of the CAGR with the set target for 2030 to understand the trends over the past five years and the expected growth rate required to reach the target.

The CAGR calculation helps determine the number of years required to achieve the target with the current rate. This analysis provides valuable insight into the progress made and the efforts needed to reach the set targets in the specified time frame. The CAGR of the past five years is compared with the target growth rate to determine the gap between the current rate and the target rate. The analysis helps to identify areas that need improvement and to prioritize efforts towards achieving the SDGs by 2030.



**The following method has been used for calculating the CAGR for aspirant goals:**

To compare the growth rate, Compound Annual Growth Rate is used:

$$\text{Compound Growth rate } I = \left( \frac{X_{n+1}}{X_n} \right)^{\frac{1}{t}} - 1 \times 100$$

Where  $X_{n+1}$  is final value

$X_n$  is initial value

$t$  is no. of years between final and initial values

**To estimate the future value is calculated as:**

$$\text{Estimate for future } = X_{n+1} = X_n(1+r)^t$$

Where  $X_{n+1}$  is future value

$X_n$  is final value

$r$  is compound growth rate

$t$  is the no of years between future value and final value

**To achieve 100% growth:**

$$100\% \text{ growth rate } = \frac{\ln(100/X_{n+1})}{\ln(1+(r/100))}$$

Where  $X_{n+1}$  is future value or final value

$r$  is the compound growth rate

### 2.3 Limitations

While the SDG report is a helpful way to measure the performance and progress of Jharkhand in adopting and implementing ways to accomplish the SDG agenda, the report has the following limitations:

- The status of Jharkhand cannot be compared entirely to SDG India Index as some indicators are specific to the state and may not apply to the calculation for the entire country.
- More importantly, every state has different capacities in which they operate as opposed to the centre. It is essential to consider this difference while promoting strategies to improve the performance of the state.
- For the aspirant goals 9 and 1, projections and future estimated growth rate have not been included due to the unavailability of data from primary and secondary sources.
- Different data sources are employed to extract data for different indicators since no single source provides the required information. Thus, there is a variation in the period of data sources which may lead to inconsistent data use.

A close-up photograph of an elderly person's hand, characterized by deep wrinkles and a brownish skin tone, gently holding a younger person's hand. The younger hand is smoother and has a lighter skin tone. The background is a blurred blue and white striped fabric. The text 'Front Runner Category' is overlaid in white on the left side of the image.

# Front Runner Category



**3** GOOD HEALTH AND WELL-BEING

**6** CLEAN WATER AND SANITATION

**7** AFFORDABLE AND CLEAN ENERGY

**10** REDUCED INEQUALITY

**11** SUSTAINABLE CITIES & COMMUNITIES

**15** LIFE ON LAND

**16** PEACE, JUSTICE, AND STRONG INSTITUTIONS





## SDG 3 GOOD HEALTH AND WELL-BEING

### ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

#### Overview

Goal 3 aims to ensure “Health and Well-being for All”. It has 13 targets and 28 indicators focusing on achieving universal health coverage that seeks equitable access to health care services for all men and women. It also focuses on addressing broader economic and social inequalities, urbanization, climate crisis and the continuing burden of HIV and other infectious diseases and challenges like non-communicable diseases. Besides, the commitment is to end the epidemics of AIDS, tuberculosis, malaria, and other communicable diseases by 2030.

SDG 3 seeks to achieve significant progress in providing access to quality health care, universal health coverage, research and development for vaccines and insurance against financial risk. While there has been significant progress within various healthcare domains, the pandemic has disrupted the scale of impact, halted implementation progress, and even reversed advancement in the state.

SDG 3 has thirteen (13) targets with nine (9) outcome-oriented targets.

**Target 3.1:** Reduce the Global Maternal Mortality ratio to less than 70 per 100,000 live births

**Target 3.2:** End preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

**Target 3.3:** End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases

**Target 3.4:** Reduce by one-third Premature Mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

**Target 3.5:** Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

**Target 3.6:** Halve the number of global deaths and injuries from road traffic accidents

**Target 3.7:** Ensure universal access to sexual and reproductive healthcare services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes

**Target 3.8:** Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all

**Target 3.9:** Substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination



**The four indicators are:**

**Indicator 3.a:** Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) in all countries, as appropriate

**Indicator 3.b:** Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, and provide access to affordable essential medicines and vaccines following the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the 'Agreement on Trade-Related Aspects of Intellectual Property Rights' regarding flexibilities to protect public health, and, in particular, provide access to medicines for all

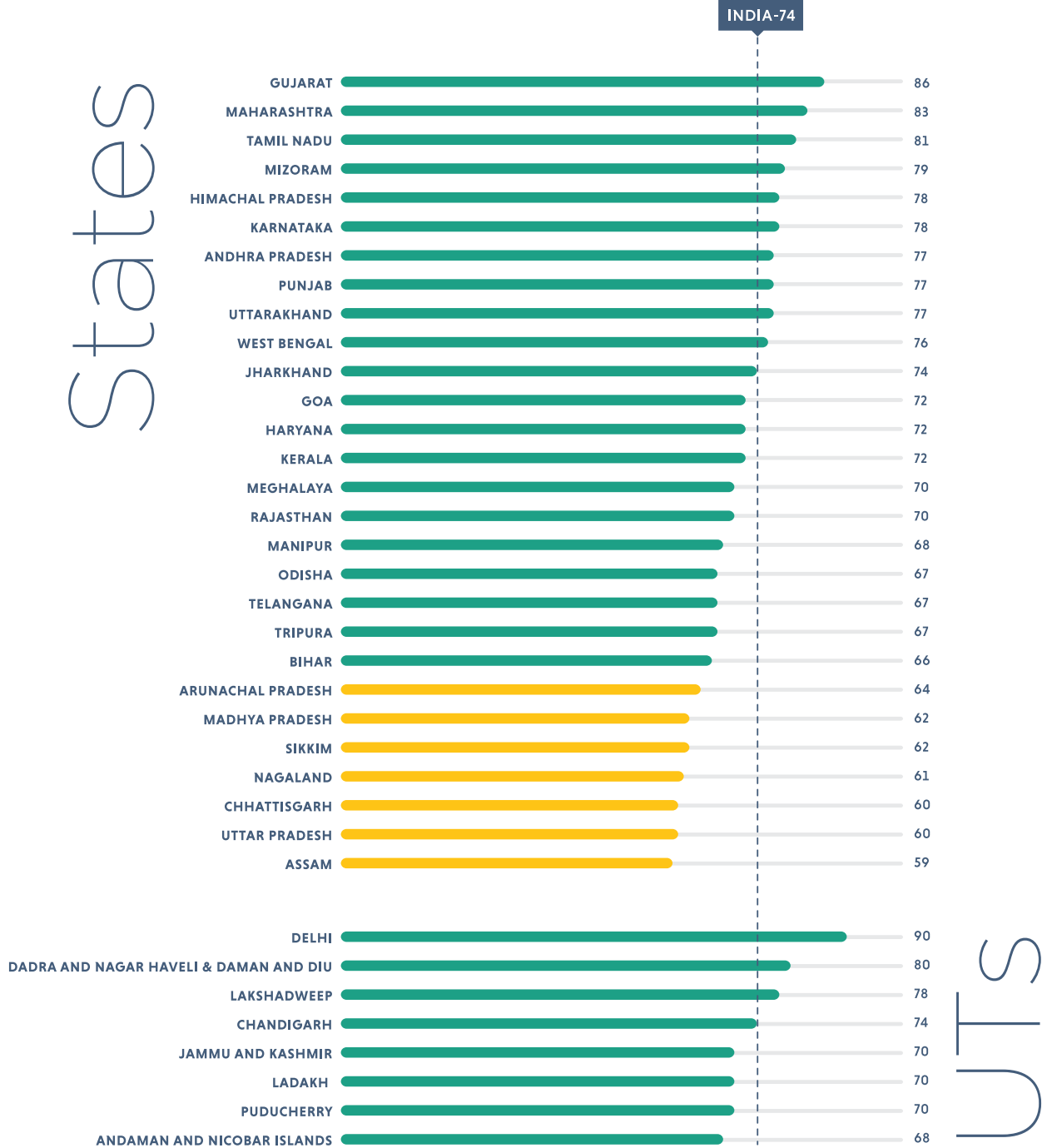
**Indicator 3.c:** Substantially increase health financing and the recruitment, development, training, and retention of the health workforce in developing countries, especially in least-developed countries and small island developing States

**Indicator 3.d:** Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

### Status and Performance of Jharkhand and India on SDG-3

With an overall composite score of 74, Jharkhand is one of the best-performing states in India and ranks amongst the front-runner states of the country on SDG 3 (India SDG Index,2021).

**Figure 2:** Index Score for Goal 3 of all States and UTs



Source: NITI Aayog, 2021

The performance of the indicators used for assessing the SDG 3 India Index 3.0 scores for Jharkhand and India for Goal 3 for the year 2020 is as follows:

**Table 1:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Maternal Mortality Ratio (per 1,00,000 live births)	71	113	70
Under 5 mortality rate (per 1,000 live births)	34	36	25
Percentage of children in the age group 9-11 months fully immunized	94	91	100
Total case notification rate of Tuberculosis per 1,00,000 population	146	177	242
HIV incidence per 1,000 uninfected population	0.04	0.05	0
Suicide rate (per 1,00,000 population)	4.4	10.4	3.5
Death rate due to road traffic accidents (per 1,00,000 population)	10.11	11.56	5.81
Percentage of institutional deliveries out of the total deliveries reported	95.8	94.40	100
Monthly per capita out-of-pocket expenditure on health as a share of Monthly Per capita Consumption Expenditure (MPCE)	11.00	13.00	7.83
Total physicians, nurses, and midwives per 10,000 population	4	37	45

Source: NITI Aayog, 2021

Table 2 draws a comparison between Jharkhand's performance for the national targets as well as India's performance. As per the given statistics, Jharkhand has performed better than India's average performance on the following indicators:

- Maternal Mortality Ratio (per 1,00,000 live births)
- Percentage of children in the age group 9-11 months fully immunized
- Total case notification rate of Tuberculosis per 1,00,000 population
- HIV incidence per 1,000 uninfected population
- Suicide rate (per 1,00,000 population)
- Percentage of institutional deliveries out of the total deliveries reported

The targets which are an area of concern include,

- Under-5 mortality rate (per 1,000 live births),
- Monthly per capita out-of-pocket expenditure on health as a share of monthly per capita Consumption Expenditure (MPCE), and
- Total physicians, nurses, and midwives per 10,000 population.

The COVID-19 pandemic affected the achievement of SDG 3 in the state. The Government of Jharkhand has taken significant measures to minimise its impact by increasing the coverage of the COVID-19 vaccine among all, especially the vulnerable sections in the state. However, the pandemic has had a lasting impact on mental health.



## Scheme mapping & Critical Outcomes

Based on the targets of Goal 3, Table 2 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 2 in appendix).

The critical outcomes of all these schemes and projects in the Jharkhand State for Goal 3:

- The life expectancy level in Jharkhand has increased from 68 years (2011-15) to 69 years (2016-20) for males and from 69 years (2011-15) to 71 years (2016-20) for females.
- The Infant Mortality Rate (IMR) per 100 live births has declined from 34 (2016) to 31(2020), while the comparable national-level figures stand at 43 and 48, respectively.
- The Under-5 mortality rate (U5MR) per 1000 live births has also declined from 74 (2005-06) to 41.9 (2020-21).
- The Maternal Mortality Rate (MMR) in Jharkhand has significantly gone down from 312 (2004-06) to 71 (2016-18).
- The public health system in the state has also improved considerably, with the government hospitals witnessing an increase in the uptake of patients. However, only 2.2% of the urban population (NSS,2019) is covered under health insurance, of which 1.6% are under an employer's health insurance scheme, and 0.5% arrange insurance privately. The state has launched the Mukhya Mantri Swasth Bhima Yojana along with the Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY), a healthcare scheme to provide healthcare assistance of Rs 5 lakhs to 50 crore beneficiaries from below poverty line. The scheme has provided health coverage to 57,10,933 families (Jharkhand State Factsheet, 2022).
- The state's healthcare infrastructure has also significantly increased, with the state having a total of 4,472 public health institutions (188- Community Health Centres, 330- Primary Health Centres, and 3,848 Health Sub-Centres) spread across 24 districts. However, the number of doctors and healthcare professionals is minimal, with only 1,710 medical officers and 9,676 ANMs to cater to the state's healthcare needs.
- The state has performed better in improving maternal and child health status, with 39,964 ASHA workers working on maternal and child health issues. There has been an improvement in institutional deliveries, with East Singhbhum recording the highest rate (91%) and Dumka ranking the lowest (60%).
- Anaemia is a significant health challenge for children in the state. Approximately 44% of children in the age group (1-4 years) are anaemic, with girls being the most affected. 51% of adolescent girls (10-19 years) falls under this category, who, if not treated properly, will eventually become anaemic mothers.
- Though immunisation is an effective healthcare strategy, the state is yet to achieve 100% immunisation among children. Only two districts, Godda and Latehar, have achieved 100% immunisation, while Deogarh and Khunti, with 58%, are the poor-performing districts.
- Though COVID-19 has proven to be a global challenge, Jharkhand has undertaken some strong measures by ensuring timely lockdowns and focusing on the management of containment zones. The healthcare infrastructure and facilities were ramped up, and at least one RT-PCR testing lab has been set up in each district to ensure quick and practical testing of suspected COVID-19 cases. Mobile RT-PCR testing vans and vaccination vehicles were deployed in all districts and blocks to ensure sufficient healthcare access to socially and economically vulnerable groups. Through a combined strategy of healthcare measures, the state has performed exceptionally well in addressing the COVID-19 challenge.

### Way forward

With a composite score of 74 for Goal 3, on the NITI Aayog SDG India Index, 2021 Jharkhand has become ranked as the 'Front-runner'. Though the state has performed well on the index, still can improve significantly on several indicators, primarily the following:

**Table 3:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Targets
Under 5 mortality rate (per 1,000 live births)	34	36	25
Monthly per capita out-of-pocket expenditure on health as a share of Monthly Per capita Consumption Expenditure (MPCE)	11.00	13.00	7.83
Total physicians, nurses, and midwives per 10,000 population	4	37	45

Source: NITI Aayog, 2021

### Under 5 Mortality Rate

The state needs to strengthen the implementation of the ICDS and enhance the schemes focussing on mother and child-care health services, including immunization and nutrition, to reduce infant mortality.

### Health Insurance

The monthly per capita out-of-pocket expenditure on health has remained high because of the limited health insurance coverage across the entire state. It has resulted in causing a significant burden on the monthly income and savings of the households. The health department may focus on expanding the coverage of the state health insurance scheme and the PMJAY and explore partnerships with private healthcare providers to cover most of the population. The process of healthcare coverage may also be simplified, and last-mile connectivity may be explored to ensure that most of the population is covered under healthcare insurance.

### Healthcare Resources

The number of total physicians, nurses, and midwives per 10,000 people in the state stands at a dismal figure of 4 and needs to improve to reach the national target significantly. The state has also seen several resignations after appointments, especially in the state's interior areas. The challenges faced by the professionals need to be reviewed, and an incentive system needs to be put in place to ensure that good health services are available to the needy. Upgradation of the status of medical colleges and education also needs to be reviewed to increase the uptake of medical professionals in the state by including quotas and reservations. The state can also explore possibilities in public-private partnerships to increase the healthcare infrastructure in the state.







## SDG 6 CLEAN WATER AND SANITATION

### ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

#### Overview

Sustainable Development Goal 6 aims to ensure 'Availability and Sustainable Management of Water and Sanitation for All'. It aims to provide access to safe and affordable drinking water, sanitation facilities, and hygiene by 2030. Access to these elements is crucial for promoting good health, economic growth, and productivity. The goal primarily focuses on accelerating water management systems to provide quality water, reduce pollution, and increase local communities' participation in water improvement and sanitation management.

Water management has become a global crisis as billions of people face the dearth of safe drinking water & clean and hygienic sanitation facilities. One in three people worldwide still lacks basic hand washing facilities with running water at home, leaving them vulnerable to diseases. The water crisis has been further accelerated by climate change leading to polluted water sources and degraded ecosystems. The key to facing this challenge is improving water use efficiency, which can contribute to reduced water stress. SDG 6 provides a vision for achieving the same. The goal has eight (8) targets, of which six have been identified as "outcome-oriented" targets, which are as follows:

**Target 6.1:** Achieve universal and equitable access to safe and affordable drinking water for all

**Target 6.2:** Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying particular attention to the needs of women and girls and those in vulnerable situations

**Target 6.3:** Improve water quality by reducing pollution, eliminating dumping and minimizing the release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

**Target 6.4:** Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

**Target 6.5:** Implement integrated water resources management at all levels, including through transboundary cooperation as appropriate

**Target 6.6:** Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes.

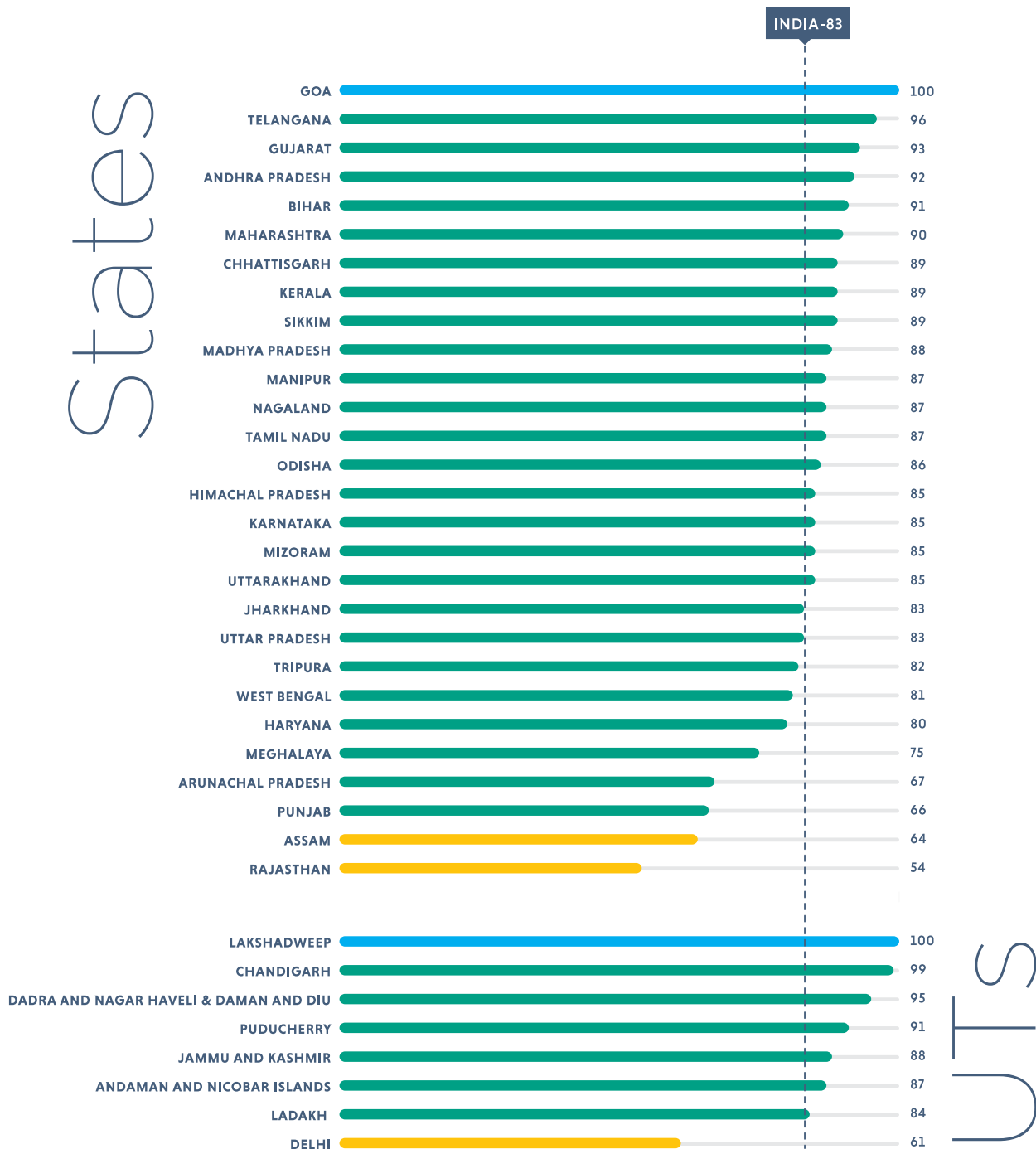
**Target 6.a:** Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

**Target 6.b:** Support and strengthen the participation of local communities in improving water and sanitation management

### Status and Performance of Jharkhand and India on SDG-6

Jharkhand has a composite score of 83 on goal 6 and is ranked as a 'Front Runner' based on its performance. The state is still ranks 19<sup>th</sup> among all the 29 states in the country.

**Figure 3:** Index Score for Goal 6 of all States and UTs



Source: NITI Aayog, 2021

The performance of the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 6 for the year 2020 is given below.

**Table 4:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Percentage of rural population getting safe and adequate drinking water within premises through Pipe Water Supply	35.49	51.36	100
Percentage of rural population having improved source of drinking water	99.71	97.44	100
Percentage of individual household toilets constructed against target (SBM(G))	100	100	100
Percentage of districts verified to be ODF (SBM(G))	100	100	100
Percentage of schools with separate toilet facility for girls	98.33	95.33	100
Percentage of industries (17 category of highly polluting industries/ grossly polluting/ red category of industries) complying with wastewater treatment as per CPCB norms	79.15	88.40	100
Percentage of ground water withdrawal against availability	27.77	63.33	70
Percentage of blocks/ mandals/ taluka over-exploited	1.15	17.24	0

Source: NITI Aayog, 2021

The above table shows that Jharkhand's performance has been significantly better than India's average on following indicators:

- Percentage of rural population access to improved sources of drinking water,
- Percentage of ground water withdrawal against availability; and
- Percentage of blocks/mandals/taluka over-exploited.

On a few indicators the state is performing significantly lower than the country's average which are as follows:

- Percentage of rural population having access to piped water supply
- Percentage of industries complying with wastewater treatment as per CPCB norms

Given the geographical profile of the state, it may be difficult to achieve 100% access to piped water supply, nevertheless it is a realistic goal. The state also needs to lend considerable focus to achieve the sub-targets of 100% Open Defecation Free status through the Swachh Bharat Mission such as provision of separate toilet facilities for girls in schools etc.

### Scheme mapping & Critical Outcomes

The following table- Table 5 maps all important state and central government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 5 in appendix). The critical outcomes of all the schemes and projects in Jharkhand for Goal 6 are reviewed below.

#### Drinking Water

- The geographical construct of Jharkhand poses a challenge to achieving 100% success on the above indicators. However, significant strides have been undertaken by the department of Drinking Water and Sanitation in the state to provide a clean, safe, and regular drinking water supply in urban and rural areas.
- Due to the concerted efforts of the state, 95.1% of households in urban areas and 84.2% of households in rural areas can access improved drinking water sources in the state (NFHS-5, 2019-21). This shows a significant improvement from the status during NFHS 4 (2015-16), when accessibility of drinking water accounted for only 88.6% in urban areas and 73% in rural areas.

- The state has undertaken several initiatives, like the National Rural Drinking Water Program and Jal Jeevan Mission (JJM), which have contributed to improved access to drinking water by providing a safe piped water supply, and aim to achieve 100% coverage by 2024. However, many more initiatives need to be undertaken to operationalize the schemes as the state needs better coverage in functional household tap connections, as only 11.4% of households are covered under this scheme.
- The quality of drinking water is still an area of concern as most of the state is affected by arsenic and fluoride, primarily the districts of Seraikela- Kharsawan (97) and East Singhbhum (393) consist of a maximum number of habitations affected by arsenic and fluoride.

### Sanitation

- The state has significantly reduced open defecation since the launch of the Swachh Bharat Mission. 233 villages have been announced as empty defecation-free villages, and the % of households with poor sanitation facilities has reduced from 70.5% to 4.2% between NFHS-4 to NFHS-5. Jharkhand has become an ODF state on the indicator of the construction of Individual Household Latrines (IHL).
- The state has achieved 100% from 16.25% of rural households with toilets over 5 years.
- Progress has also been reported in household sanitation as approximately 897, and 932 wards have reported 100% door-to-door garbage collection services, and out of these, 752 wards have reported 100% source segregation. The successful implementation of schemes such as Swachh Bharat Mission- Gramin, Swachh Bharat Mission-Urban, and Jal Jeevan mission has resulted in Jharkhand achieving good performance in most indicators of sanitation.

### Way forward

Jharkhand has achieved a composite score of 83 and is ranked as a 'Front Runner' on the SDG India Index, 2021. However, the performance of the state on the following indicators needs to be improved.

**Table 6:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Targets
Percentage of rural population getting safe and adequate drinking water within premises through Pipe Water Supply	35.49	51.36	100
Percentage of ground water withdrawal against availability	27.77	63.33	70

Source: NITI Aayog, 2021

### Percentage of Rural population getting access to Pipe Water Supply.

On this indicator, only 35.5% of the population is covered against the national target of 100% and is also below the country's performance of 51.36%. To improve the performance of the state on this indicator, the state government may focus on scaling up the implementation of the Jal Jeevan mission and its component sub-schemes in the state. The scheme's coverage needs to increase considerably, in tandem with the budget allocation for the schemes as well. The scope should include the water distribution pipeline network, water source, and wastewater treatment.

### Percentage of Groundwater withdrawal against availability

Though groundwater withdrawal is at a conservative level (28%), a well-managed groundwater development program, primarily for irrigation, must be developed accompanied by watershed management and groundwater recharge to make it both sustainable and economically beneficial.

The performance on this goal shall also reflect on the performance of the state on two other goals, Goal 1- End Poverty and Goal 2- End Hunger. The nodal departments of the Water Resources department and the Jharkhand state watershed mission may direct the state in achieving this vision.









## SDG 7 AFFORDABLE AND CLEAN ENERGY

### ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

#### Overview

SDG 7 aims to ensure universal access to 'Access to Affordable, Reliable, Sustainable and Modern Energy for All' by 2030. Developing critical infrastructure and updating technology to provide clean and efficient energy is essential, as energy security is a prerequisite for sustainable socio-economic development. Access to energy enables people to augment their income and productivity, enhance access to healthcare, water, and education, and improve their overall well-being. While the world has achieved significant energy access and sustainability, a lot still needs to be done to achieve energy security.

#### **SDG 7 has five targets. The three “outcome-oriented targets” are:**

**Target 7.1:** Ensure universal access to affordable, reliable, and modern energy services

**Target 7.2:** Increase the share of renewable energy substantially in the global energy mix

**Target 7.3:** Double the global rate of improvement in energy efficiency

#### **The two indicators are:**

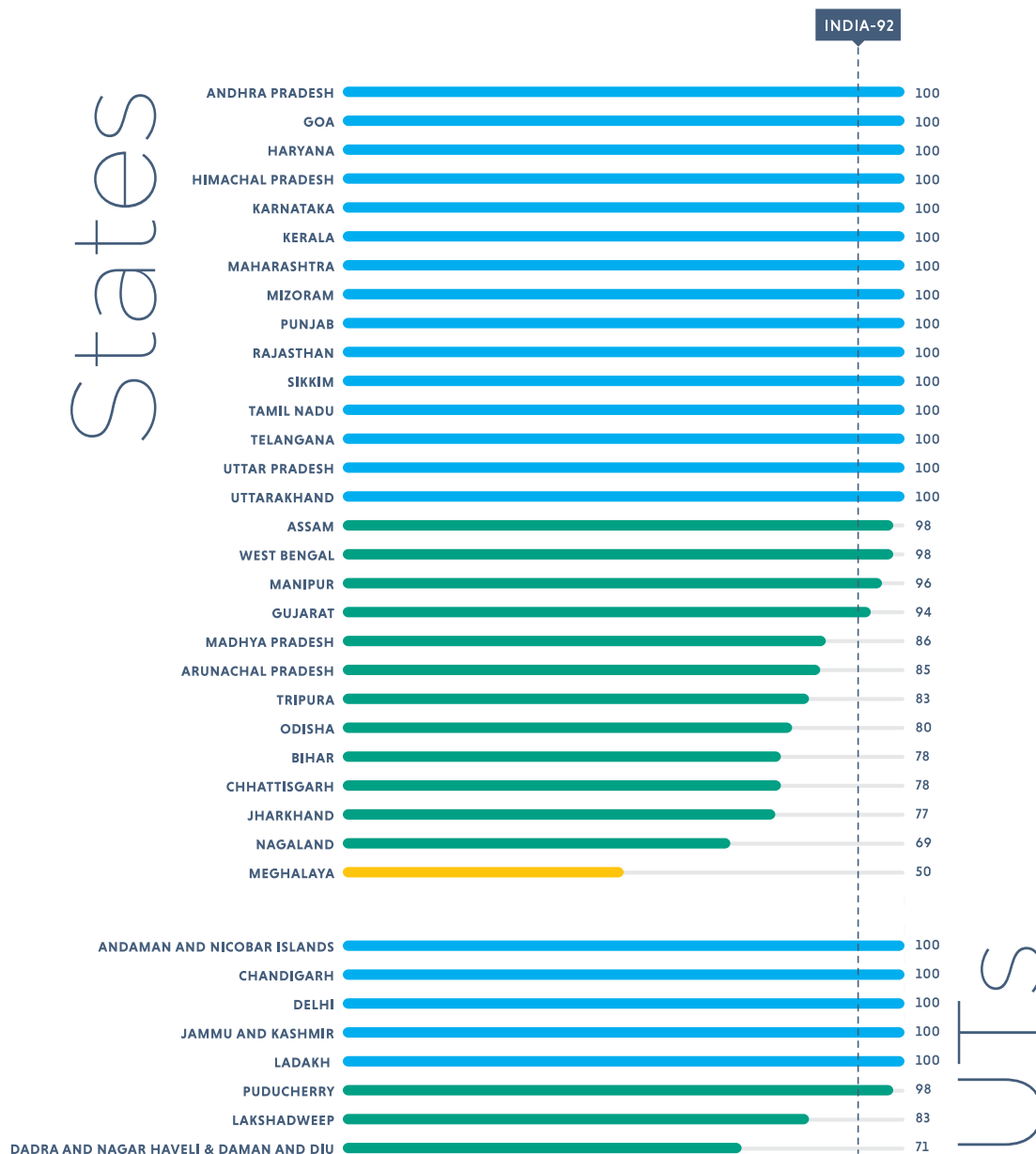
**Target 7.a:** Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

**Target 7.b:** Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, following their respective programmes of support.

### Status and Performance of Jharkhand and India on SDG-7

The state's composite score of 77 has been ranked as a 'Frontrunner' on the SDG India Index 2021. India has an average score of 92, and fourteen states have achieved a perfect score of 100<sup>1</sup>

**Figure 4:** Index Score for Goal 7 of all States and UTs



Source: NITI Aayog, 2021

The performance of the state on the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 7 for the year 2021 is given below.

**Table 7:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Percentage of households electrified	100	99.99	100
Percentage of LPG+PNG connections against number of households	75.79	92.02	100

Source: NITI Aayog, 2021

Jharkhand has performed extremely well by achieving the 100% of the national target for the indicator ‘% of households electrified.’ However, Jharkhand has not been able to achieve the national target for the indicator, ‘Percentage of LPG+PNG connections against number of households.’ The successful implementation of the government scheme of Pradhan Mantri Ujjwala Yojana may help achieve the target.

### **Scheme mapping & Critical Outcomes**

Based on the targets of Goal 7, Table 8 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 8 in appendix).

The critical outcomes of all these schemes and projects in the Jharkhand state for Goal 7 are reviewed below:

- The Domestic power consumption was at its highest at 5,886.49 MU in the year 2020-21, followed by the power consumption industry at 2,730 MU. The total availability of power increased from 10,859 MW in 2014-15 to 11,748 MW by 2020-21. While the years 2019-20 and 2020-21 have seen a power surplus, the peak demand, as well as peak availability level, has drastically reduced in 2019-20 compared to 2018-19. This can be attributed to the COVID-19 pandemic and its impact on the economy because most industries had to halt production for a significant period.
- One of the vital sources of power is coal, which constituted a maximum of 86.13 per cent of Jharkhand’s total ‘installed capacity’ in 2020. Thermal energy equivalent to 2,359.18 MW has been generated from coal after combining the state, central and private sources.
- Hydroelectricity is the second most crucial power source contributing 7.22 per cent to the total ‘installed capacity’. While renewable sources of energy have only provided 92.79 MW, it’s worth noting that their contribution has been steadily increasing since the year 2020, when it was only 47.41 MW.
- As per the India Energy Outlook 2021, Jharkhand has high energy consumption due to hefty steel and cement industries. The energy consumed by the high voltage industries in 2019-2020 was 18,482.870 GWh of electricity, whereas only 210.36 GWh and 5,683.38 GWh of electricity were consumed for agriculture and domestic purposes, respectively.
- The state has also seen significant progress after implementing the Deen Dayal Upadhyay Gram Jyoti Yojana (DDUGJY) scheme with electrification facilities in all 383 sanctioned villages of Jharkhand. The development in distribution transformers, feeder segregation, LT lines and 11 KV lines are almost near the target set, reflecting the DDUGJY scheme’s achievement.
- Jharkhand’s geographical location allows four to five hours of bright sunshine highlighting its potential to produce 18,180 MW of solar energy. Thus, the state is promoting renewable energy sources under the Jharkhand Renewable Energy Development Agency Ltd (JREDA) and the state’s Solar Rooftop Policy (2018).

### **Way forward**

Jharkhand has earned a ‘Frontrunner’ status with a score of 77 against India’s average score of 92 in Goal 7. The majority of the households in the state already have access to electricity. However, the state still needs to achieve the 100% target of providing LPG+PNG connections to every household. The state needs to undertake a renewed focus on this indicator to expand coverage, particularly under the Pradhan Mantri Ujjwala Yojana.

Though the state has consistently performed well on the achievement of the indicators under Goal 7, with the growing energy demand shortly, mainly fuelled by socio-economic development, the state will have to work on prioritizing quality of energy and efficiency along with accessibility and availability. Priority should be accorded to an expansion of sources of renewable energy generation, particularly with the potential it has for solar energy.





## SDG 10 REDUCED INEQUALITY

### REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES

#### Overview

SDG 10 aims to reduce inequality within and among countries and target inequality systematically. It aims to promote social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, religion, or status. It ensures the availability of equal opportunity for all by eliminating discriminatory laws, policies, and practices and improving global financial institutions' regulation.

The COVID-19 pandemic has impacted a significant proportion of India's population, irrespective of their economic status. While the pandemic has directly affected people's health, it has also indirectly influenced the financial situation of the population in the state. According to Bhattacharya and Bannerjee (2021), Jharkhand has a high economic vulnerability index due to its high population that continues to persist below the poverty line (BPL), special unemployment rate, low per capita state domestic product and high rural population, making it one of the states with a higher level of economic inequalities.

Reducing inequality requires systemic and transformative change. Therefore, to reduce inequality and ensure inclusive economic growth, the following targets and indicators have been set:

**Target 10.1-** Progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

**Target 10.2-** Empower and promote the social, economic, and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or status

**Target 10.3-** Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies, and action in this regard

**Target 10.4-** Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality

**Target 10.5-** Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations

**Target 10.6-** Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions to deliver more effective, credible, accountable, and legitimate institutions

**Target 10.7-** Facilitate orderly, safe, regular, and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.

#### The targets for the indicators are:

**Indicator 10.a-** Implement the principle of special and differential treatment for developing countries, in particular least developed countries, following World Trade Organization agreements.

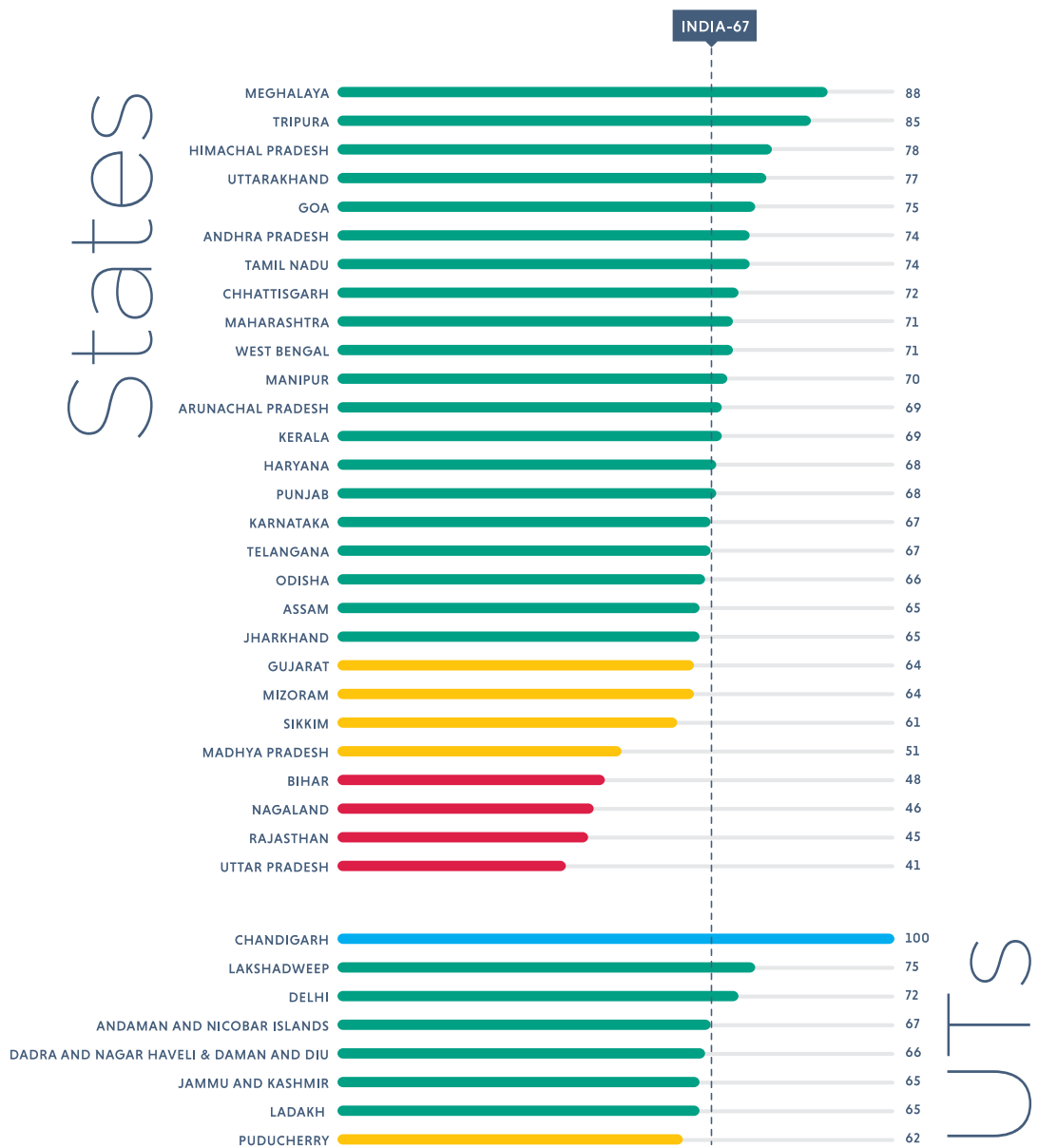
**Indicator 10.b-** Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular, least developed countries, African countries, small island developing States and landlocked developing countries, following their national plans and programmes.

**Indicator 10.c-** Reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent.

### Status and Performance of Jharkhand and India on SDG-10

Jharkhand, with a composite index score of 65, has been ranked as a 'Frontrunner' in the SDG India Index, 2021. As per the index, Jharkhand stands at 20<sup>th</sup> position among all the states in the country and Meghalaya and Tripura are the top performing states.

**Figure 5:** Index Score for Goal 10 of all States and UTs



Source: NITI Aayog, 2021

The performance of the state on the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 10 for the year 2021 is given below.



**Table 9:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Target
Percentage of population in the lowest two wealth quintiles *	68	40	4.67
Percentage of elected women over total seats in the State/UT (Lok Sabha elections)	14.29	14.39	50
Percentage of seats held by women in Panchayati Raj Institutions (PRIs)	51.57	45.62	33
Percentage of SC/ST seats in State Legislative Assemblies	45.68	28.35	NA
Ratio of transgender to male Labour Force Participation Rate (LFPR) (15 years and above)	0.86	0.64	1
Rate of total crimes against SCs (per 1,00,000 SC population)	16.3	22.8	0
Rate of total crimes STs (per Index Score 1,00,000 ST population)	4	7.9	0

Source: NITI Aayog, 2021

Seven national-level indicators have been identified to measure the performance of Goal 10. Of the seven indicators, Jharkhand has achieved better than the national performance on four indicators

- Percentage of the population in the lowest two wealth quintiles
- Percentage of seats held by women in Panchayati Raj Institutions (PRIs)
- Percentage of SC/ST seats in State Legislative Assemblies
- Ratio of transgender to male Labour Force Participation Rate (LFPR) (15 years and above)

On two indicators, Jharkhand has performed below the national average and needs improvement to reach the expected target.

- Rate of total crimes against SCs (per 1,00,000 SC population)
- Rate of total crimes STs (per Index Score 1,00,000 ST population)

### **Scheme mapping & Critical outcomes**

Based on the targets of Goal 10, Table 10 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 10 in appendix).

The state government has undertaken a series of reforms for economic and social upliftment for minority communities. The outcomes and progress of these schemes, as referred from the Jharkhand Economic Survey (2021-22) have been mentioned below:

- According to the Jharkhand Economic Survey (2020-2021), 16 centrally sponsored projects are running in the state catering to the welfare grants for the Scheduled Tribes across 8 different sectors such as Education, Culture, Irrigation, Skill Development, Sports, and Watershed Management.
- The state government has undertaken a pre-matric scholarship scheme for school students to reduce school dropout rates. However, the number of ST beneficiaries of the scheme has declined from 5,23,549 in 2020-21 to as low as 91,315 in 2021-22 (Oct '21). While for the SC population, there was a decline from 2,50,999 (2020-21) to 47,795 (2021-22).

- Through the Reimbursement of the Examination fee scheme, the government of Jharkhand aims to make education accessible to the marginalised communities of the ST, SC and OBC categories by exempting them from examination fees in the matriculate and intermediate examinations conducted by the Jharkhand Academic Council. The total number of beneficiaries under the scheme includes 22,879 beneficiaries in 2020 which declined to 1,14,229 in 2021.
- The Merit cum Means Scholarship program offers financial support to pursue professional and technical courses to students of minority communities. Students with a family income of Rs. 2.5 lakhs or less are eligible for this scholarship.
- The Government of Jharkhand has invested 5,095.41 lakhs for the financial year 2021-22 to ensure the 'Eklavya Model Residential Schools (EMRS)' can provide primary education to the tribal children. While there are only 13 functional EMRS with 2,709 student beneficiaries (2709 out of which 1,162 are males and 1,547 are females), the remaining 70 EMRS in the state are non-functional.
- Eligible students are offered financial assistance of Rs 3,500 each through the Aadhaar-enabled Direct Benefit Transfer under the Cycle Distribution Scheme. During the financial year 2019-20, 86,010 ST beneficiaries, 42,454 SC beneficiaries, 1,20,490 BC beneficiaries and 45,994 miscellaneous minorities could access the scheme. However, the cycles distributed under the scheme for the financial year 2020-21 have been zero.
- According to the Department of Rural Development, the Birsa Awas Yojana has successfully provided standard housing to the tribals living in the rural parts of Jharkhand. However, the highest number of houses sanctioned has been 4,519 and 2,465 for the year 2018-19 and 2019-20, respectively, whereas 2021-22 and 2021-22 account for the lowest numbers with 275 and 205 sanctioned housing units, respectively.

### **Skill development and Financial Support**

Several programs by the state government are implemented to ensure skill development and regular income to the marginalised, including the Kalyan Gurukul program, Targeting the Hard-Core Poor'(THP) program, Mechanism for Marketing of Minor Forest Produce (MFP) program, Tejaswini Project and Rajya Vidhwa Samman Pension Yojana.

- The Gurukul is a multi-trade skill development centre set up with the primary aim of ensuring skill development of the tribal and backward communities to enhance their technical and soft skills. In 2020-21, 1,760 people from backward communities were trained under the Kalyan Gurukul program, out of which 1,601 trainees were placed.
- 'Targeting the Hard-Core Poor'(THP) program is the scheme that has been tailored to provide the required interventions to Particularly Vulnerable Tribal Groups (PVTGs) of Jharkhand. The goal of the scheme is to provide the required assistance in ensuring a sustainable source of income generation to aid 8,500 PVTG households of Santhal Pargana out of extreme poverty in 2 years. A total of 500 beneficiaries have been registered under the THP program.
- The Mechanism for Marketing of Minor Forest Produce (MFP) program through Minimum Support Price (MSP) and Development of a Value Chain for MFP aims to set up a system that provides fair monetary returns in the collection, primary processing, storage, packing and transportation.
- Tejaswini Project aims to ensure social and economic development for adolescent girls by providing education and skills to financially sustain the economy. According to the Department of Women and Child development data, 5,45,153 out of 11,67,317 adolescent girls registered in Tejaswini clubs have been imparted with life skills (Department of Women and Child Development, 2021-22).
- Under the Rajya Vidhwa Samman Pension Yojana, a monthly pension of Rs. 600 has been allocated to the widows of Jharkhand to ensure their financial empowerment.

## Differently Abled Persons

According to the Census (2011), Jharkhand accounts for 2.87 % of the total disabled persons in the country. The government has made efforts to acknowledge and include the differently abled section of the people by implementing various schemes and measures such as special equipment for the disabled; organising workshops for the disabled; conducting economic and social surveys of the disabled; state funds for the disabled. Moreover, the state has invested in setting up a central fund to support their welfare. Similarly, scholarships have been initiated to ensure that differently-abled students have access to Government run schools and colleges.

## Way forward

Jharkhand has been ranked in the 'Frontrunner' category for Goal 10 with a composite index score of 65, which is very close to the India average of 67. On several indicators for Goal 10, Jharkhand is not only ahead of the country's average performance but, on some, has already achieved and, on a few other indicators, is very close to the national target. Only on two indicators, Jharkhand is substantially behind the national target and will need to increase efforts to achieve this by 2030. These include the following:

**Table 11:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Target
Percentage of population in the lowest two wealth quintiles	68	40	4.67
Rate of total crimes against SCs (per 1,00,000 SC population)	16.3	22.8	0

Source: NITI Aayog, 2021

## Percentage of the population in the lowest two wealth quintiles

Jharkhand's performance on this indicator is 68%. The poor performance on this indicator may have been accelerated by COVID-19 in the last two years. Improvement in performance on this goal will also have a multiplier effect on achieving Goal 1- No Poverty and Goal 2- Zero Hunger. Therefore, the state needs to take action by improving the access to education by increasing greater number of beneficiaries in schemes like pre-matric scholarship scheme, reimbursement to examination and tuition fees, along with increasing the number of operational Eklavya Model Residential Schools (EMRS) for the underprivileged. Moreover, improvement in social safety nets would help the poor to have backup in case of emergencies. Promoting financial inclusion can also help to reduce the percentage of people by providing access to bank accounts and credits to ensure financial stability.

## Rate of total crimes against SCs (per 1,00,000 SC population)

The rate of total crimes against SCs (per 1,00,000 SC population) in Jharkhand is 16.3, below the Indian average of 22.8. However, achieving the national target of 0 is a challenge as the performance on the indicator is attributed to a situation of law and order but also to changing cultural attitudes, practices, and human behaviour. Strict and rigorous implementation of the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989, including timely police action and judicial process, may assist in bringing the rate down. Significant efforts need to be undertaken to generate community awareness and empowerment to change cultural attitudes and practices and human behaviour that lead to such crimes to reduce the total crime rate. The state government may consider introducing such awareness activities in schools and colleges through public campaigns and print, electronic and social media communication.





## SDG 11

# SUSTAINABLE CITIES & COMMUNITIES

## MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE RESILIENT AND SUSTAINABLE

### Overview

Sustainable Development Goal 11 envisions promoting inclusive and sustainable urbanization by providing access to safe and affordable housing, improving the quality of public facilities, and ensuring inclusive urban planning and management by 2030 (NITI Aayog, 2021). Increasing urbanization and the accompanying economic parameters have led to a noticeable surge in households' access to essential services such as water, electricity, and sanitary facilities. The inability of cities to efficiently accommodate the urban population into its boundaries draws a sharp focus on urban unsustainability, especially for marginalized groups such as Scheduled tribes, Scheduled castes, females, and other religious minorities.

SDG 11 focuses on human settlements, increased urbanization, and the improvement of cities. Cities today provide the density, interaction and networks that make people more productive and creative. They are also the key to ensuring its inhabitants' social and economic growth. Hence, creating sustainable cities would increase career and business opportunities, provide safe and affordable housing, and build resilient societies and economies.

Despite the significant efforts, COVID's impact on the health and economic system have affected the efficiency of these initiatives, aggravating the inequalities. The pandemic has widened the cracks within urban planning and management in multiple ways, highlighting the acute need to revisit the actions and means required to achieve the proposed targets:

**Target 11.1:** Ensure access to adequate, safe, affordable housing and essential services.

**Target 11.2:** Provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with particular attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

**Target 11.3:** Enhance inclusive and sustainable urbanization and capacities for participatory, integrated, and sustainable human settlement planning and management in all countries

**Target 11.4:** Strengthen efforts to protect and safeguard the world's cultural and natural heritage

**Target 11.5:** Reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to a global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

**Target 11.6:** Reduce the adverse per capita environmental impact of cities, including by paying particular attention to air quality, municipal and other waste management

**Target 11.7:** Provide universal access to safe, inclusive, and accessible green and public spaces, particularly for women and children, older persons and persons with disabilities.

**The indicators for the target are as follows:**

**Indicator 11.a** Support positive economic, social, and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

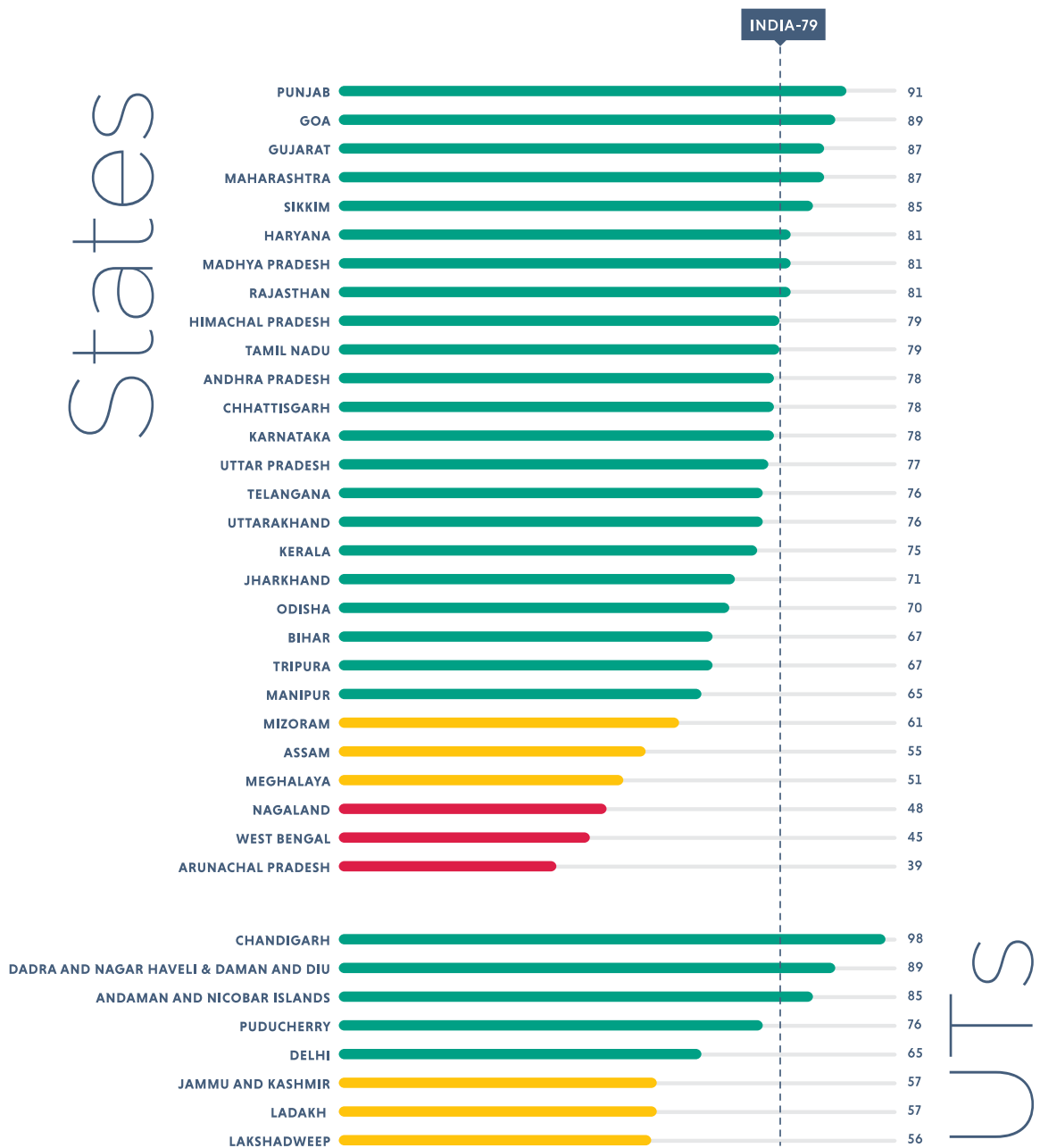
**Indicator 11.b** Increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

**Indicator 11.c** Support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials

**Status and Performance of Jharkhand and India on SDG-11**

Jharkhand, with a composite score of 79, has been identified as a ‘Frontrunner’ according to the SDG India Index, 2021. It is ranked 18<sup>th</sup> among all the states in the country.

**Figure 6:** Index Score for Goal 11 of all States and UTs.



Source: NITI Aayog, 2021

Eight national-level indicators have been identified and analyzed to assess the performance of the goal of sustainable cities and communities. These indicators have been chosen concerning the available data at the sub-national level with the agenda to measure the performance of Jharkhand in comparison to India and its neighbouring states and UTs.

**Table 12:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Target
Urban Households Living in Katcha Houses (%)	0.80	0.80	0
Deaths due to road accidents in Urban Areas (Per1,00,000 Population)	18.36	12.20	7.05
Wards with 100% Door to Door waste collection (SBM(U)) (%)	96.24	96.77	100
Individual Household Toilets constructed against target (SBM(U)) (%)	135	105	100
MSW processed to the total MSW generated (SBM(U)) (%)	64	68.1	100
Wards with 100% Source Segregation (SBM(U)) (%)	65.33	78.03	100
Installed Sewage Treatment Capacity as a percentage of Sewage Generated in Urban Areas	31.92	38.86	100
Urban Households with Drainage Facility (%)	75.1	87.6	100

Source: NITI Aayog, 2021a

Eight national-level indicators have been identified to measure the performance of Goal 11. Of the eight indicators, Jharkhand has achieved better or equal to the national performance on the following indicators:

- Urban Households Living in Katcha Houses (%)
- Wards with 100% Door to Door waste collection (SBM(U)) (%)
- Individual Household Toilets constructed against target (SBM(U)) (%)

Jharkhand's performance is lesser than national level performance in four indicators:

- MSW processed to the total MSW generated under Swachh Bharat Mission (Urban) (%)
- Wards with 100% source segregation under Swachh Bharat Mission (Urban) (%)
- Installed sewage treatment capacity as a percentage of sewage generated in urban areas
- Urban households with drainage facilities (%)
- Deaths due to road accidents in Urban Areas (Per 1,00,000 Population)

Concerning the goal 11 indicators, Jharkhand's performance has significantly improved from 2018-19 to 2019-20 (Jharkhand Economic Survey, 2021-22). However, it still needs to improve its performance, to shift from the 'Frontrunner' to the 'Achiever' category.

### Scheme mapping & Critical Outcomes

Given are the various central and state government schemes that were implemented to achieve the targets for SDG 11 by 2030 (See Table 13 in appendix).

The outcomes of the above schemes and projects have been mentioned below:

- There has been an approximately 50% increase in the number of Self-Help Groups (SHGs) formed between the years 2018-19 to 2021-22 (Jharkhand Economic Survey 2021-22).

- Under the Financial Inclusion & Self Employment Programme (FI & SEP), the unemployed urban poor are provided with the required financial assistance to set up their own small enterprises and make them financially independent. The Financial Inclusion (FI) and Self Employment Program (SEP) component in FY 2021-2022 stands at 10,820, which shows a decline in the number of beneficiaries compared to the last three years.
- In FY 2019-20, the total number of basic saving accounts opened for street vendors was 10,956, which declined to 142 in the financial year 2021-22. Similarly, there was a sharp decline in the total number of street vendors trained under the capacity building program from 10,596 in 2019-20 to 4625 in 2021-22. One of the possible reasons could be the lockdowns during the COVID-19 pandemic.
- 56 shelter homes and 1,585 shelter beds have been allocated under the Shelter for Urban Homeless Programme. Ranchi has the highest allotment of shelter homes (11) and beds (218) followed by Jamshedpur. However, the total number of shelter beds has reduced from 95 to 56, and shelter homes from 2,177 to 1,585 in the last financial year.
- More than two lakh house allotments were sanctioned under the Pradhan Mantri Awas Yojana (Urban). The city-wise progress report of the PMAY-U reveals that Ranchi, Dhanbad, Deoghar, Chas and Lohardaga received the highest financial assistance and completed the highest number of houses in the FY 2021-22.
- The Government has increased its expenditure on water supply, sewerage and parks from 155.18 crores in FY 2020-21 to 180.50 crores in 2021-22 under the Atal Mission for Rejuvenation and Urban Transformation mission.
- The Mukhyamantri SHRAMIK Rozgar Yojana issues job cards for employees to reduce the economic and social impact of the reverse migration that most urban poor had to go through due to the pandemic. The three cities with the highest number of issued job cards are Ranchi (3400), Deoghar (2613), Jamshedpur (2161), respectively.
- Scheme for Adolescent girls includes two components- nutrition and non-nutrition- under which the physical, mental, and physiological needs of adolescent girls have been considered. In 2021-22, the total budgetary allocation was revised for non-nutritional programmes, and nutritional programmes are Rs. 230 lakhs and Rs. 354 lakhs, respectively (Department of Women, Child Development & Social Security, Government of Jharkhand).

### **Way forward**

Jharkhand, with a composite score of 71, ranks as a 'Front-runner' among all the Indian states on the SDG Index during 2021. The state has displayed good performance on many indicators of the goal and is set to achieve the national targets on the remaining shortly. However, on indicators related mainly to drainage and waste management, Jharkhand still needs to travel a distance to achieve the national targets. The indicators that need renewed focus are as follows:



**Table 14:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Target
% Of urban households with drainage facility (%)	75.1	87.6	100
% Of wards with 100% door to door waste collection (SBM(U)) (%)	65.33	78.03	100
% Of MSW processed to the total MSW generated (SBM(U)) (%)	64	68.1	100
Installed sewage treatment capacity as a % of sewage generated in urban areas	31.92	38.86	100
Deaths due to road accidents in urban areas (per 1,00,000 population)	18.36	12.20	7.05

Source: NITI Aayog, 2021

### Improvement in Drainage and Waste Management

Of the above indicators, the percentage of installed sewerage capacity stands at inadequate coverage, and the state needs to significantly improve to achieve the national target of 100% coverage. Achieving improved performance on this indicator is crucial, as improper sewage disposal will result in sewage discharge into freshwater sources. Focus may be diverted to providing additional resources and funds to the targeted schemes to achieve the national targets.

### Deaths due to road accidents in urban areas

Another indicator for improvement is the number of deaths due to road accidents in urban areas (per 1,00,00 population). Improving the road infrastructure, particularly in urban areas, by providing adequate space and facilities for pedestrians, such as pavements, safe crossing zones, functional traffic lights etc. Along with the infrastructural improvements, awareness programs on road safety, traffic rules and incentivizing and penalizing rude behaviour by motorists.







## SDG 15 LIFE ON LAND

### PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

#### Overview

SDG 15 aims to reduce deforestation and land degradation through sustainable management of forests and the upliftment of biodiversity. Forests constitute 31% of the earth's land and significantly ensure sustenance and recreation. According to the UN Forum on Forests Secretariat, achieving sustainable forest management on a global scale would cost US\$70-\$160 billion per year.

Though the COVID-19 pandemic has restricted the whole country to their homes, government permissions were given to coal mining and infrastructure development near ecologically sensitive zones, which cause significant degradation to native flora and fauna. SDG 15 has twelve targets. The nine "outcome-oriented targets" are:

**Target 15.1-** Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

**Target 15.2-** Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally.

**Target 15.3-** Combat desertification and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world.

**Target 15.4-** Ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity and provide benefits essential for sustainable development.

**Target 15.5-** Take urgent and significant action to reduce the degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species.

**Target 15.6-** Ensure fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to genetic resources.

**Target 15.7-** Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both the demand and supply of illegal wildlife products.

**Target 15.8-** Introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.

**Target 15.9-** Integrate ecosystems and biodiversity values into national and local planning, development processes, poverty reduction strategies, and accounts.

#### The three indicators are:

**Indicator 15.a-** Mobilise and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems

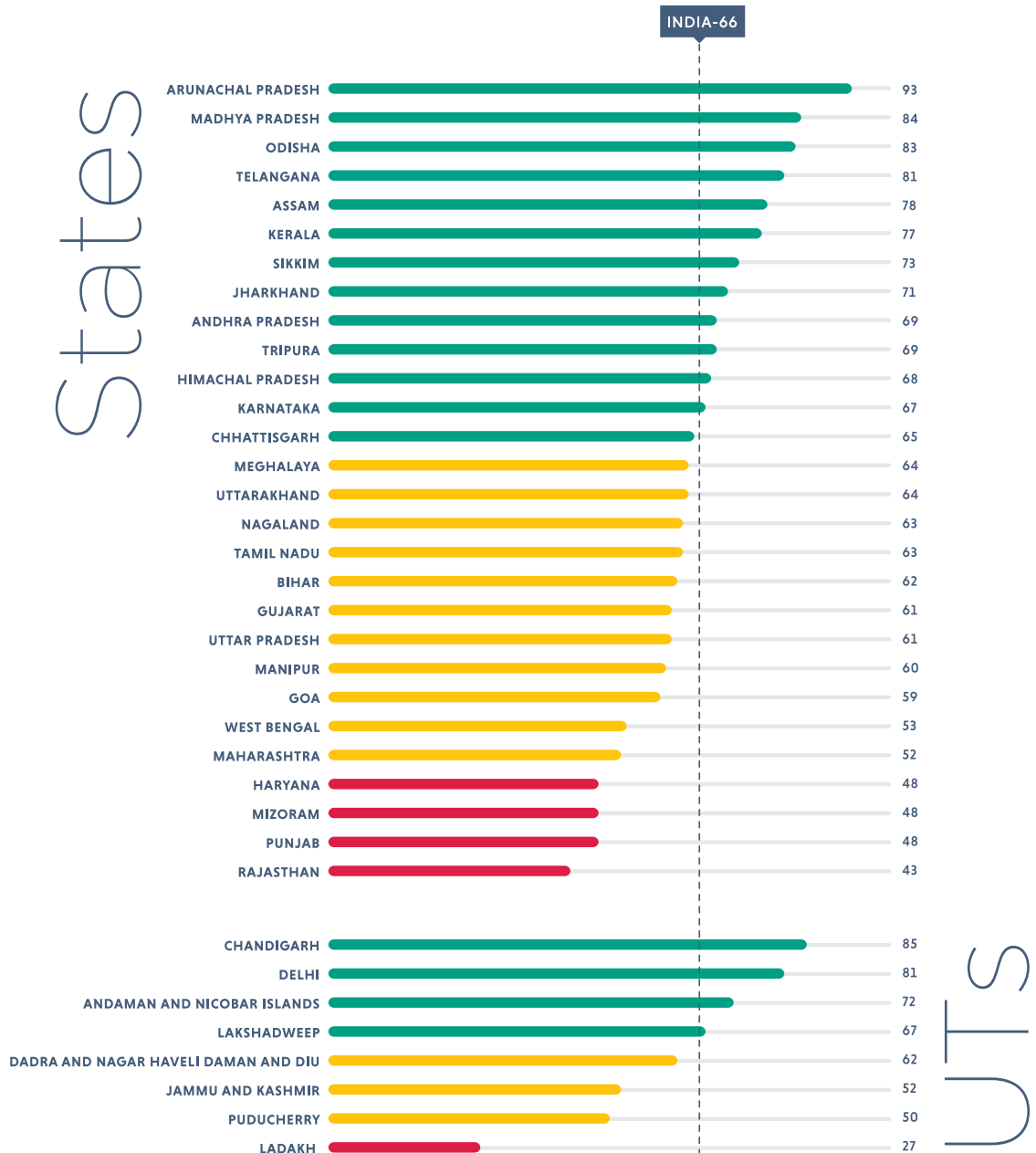
**Indicator 15.b-** Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation.

**Indicator 15.c-** Enhance global support to efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

### Status and Performance of Jharkhand and India on SDG-15

Jharkhand stands in the front-runner category with a score of 71 against India's average score of 66 in the NITI Aayog's SDG India Index 3.0 (NITI Aayog, 2021a). Jharkhand ranks 9th among all states and UTs in India for this SDG. (Figure 6).

**Figure 7:** Index Score for Goal 15 of all States and UTs



Source: NITI Aayog, 2021

Five national level indicators have been identified to measure the success of Goal 15. According to table 15, Jharkhand has recorded good performance on most of the indicators and has been ranked as a 'Frontrunner'.

**Table 15:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Target
Forest cover/ Tree cover as a percentage of total geographical area	32.95	24.56	33
Percentage of area covered under afforestation schemes to the total geographical area	0.29	0.51	2.74
Percentage of degraded land over total land area	16.56	27.77	5.46
Percentage increase in area of desertification	1.48	1.98	0
Number of cases under Wildlife Protection Act (1972) per million hectares of protected area	Null	15	0

Source: NITI Aayog, 2021

Of the five indicators, Jharkhand has recorded good performance on the indicator for increased forest cover/tree cover as a percentage of the total geographic area. However, on three indicators, Jharkhand has recorded poorer performance than India's average score and is much below achieving the national target for the goal. The goals are:

- Percentage of the area covered under afforestation schemes to the total geographical area
- Percentage of degraded land over a total land area
- Percentage increase in the area of desertification

Jharkhand does not have recorded data on one of the indicators- The number of cases under the Wildlife Protection Act (1972) per million hectares of a protected area.

### **Scheme mapping & Critical Outcomes**

Based on the targets of Goal 15, Table 16 maps all-important state and central government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 16 in appendix).

**The performance on the state on the schemes and programs is discussed below:**

#### **Forest Cover**

The total forest cover size is 23,721 square kilometres which is 29.76 per cent of the State's geographical area. As a percentage of the total forest cover, the shares of very dense, moderately dense, and open forests are about 11 per cent, 41 per cent and 48 per cent, respectively. The State also has a tree cover of 2,867 square kilometres, which accounts for 3.60 per cent of the total geographical area.

Eight of the twenty-four districts have more than 33 percent forest cover in the State. The districts Latehar (56 per cent) have the most extensive forest cover, and Jamtara (5.85 per cent) have the lowest forest cover in the State.

#### **Compensatory Afforestation Fund Management and Planning Authority (CAMPA)**

Compensatory Afforestation Fund Management and Planning Authority (CAMPA) promotes afforestation and regeneration activities by compensating for forest land diverted to non-forest uses. The prime task of State CAMPA is regenerating natural forests and building up the institution engaged in this task in the State Forest Department. In the financial year 2021, about 190 hectares of land have been diverted against 71 hectares received for the compensatory afforestation.

#### **Eco-Tourism**

The government has proposed to harness the tourism potential of the forests in the State by developing camping sites with basic infrastructural facilities and public convenience services. The government will provide accommodation to tourists by opening the Forest Rest Houses (FRH) to the public.

The major themes of the Eco-Tourism policy, which is a component of the broader Jharkhand Tourism Policy, 2020 cover a broad spectrum of objectives ranging from conserving forests to community participation to enhance their economic conditions through eco-tourism activities. Wildlife conservation, capacity building and environmental awareness.

With the help of Herbal traditional medicinal practices are identified. Based on this, authenticated and certified products are sold to tourists to increase the economic conditions of the people in these suitable locations. Natural Resources

Due to its large mineral reserves, mining and mineral extraction are the major industries in the state. In the financial year 2019-20, the mining and quarrying sector contributed about 8.9 per cent to the State's Gross State Value Added (GSVA).

### **Integrated Natural Resource Management**

It includes the enhancement of livelihood through livestock intensification, developing pig-breeding centres, promoting vegetable clusters, raising mango orchards, raising nutrition gardens, barbetta cultivation with the PVTG community, and fruit-tree plantations with the PVTG community. The project's total cost is 635 crores for eight years from 2013-21, and villages covered under integrated natural resources management are 1467.

### **Water Resources and Irrigation Potentials**

On average, Jharkhand receives decent rainfall throughout the year in the country. However, the State needs perennial rivers. Hence, the conservation of water resources and their sustainable use has been among the top priorities of governments. The department of water resources of the government of Jharkhand is currently undertaking several schemes and programmes whose objective is to promote sustainable and efficient use of the water resources in the State through discoveries and conservation of existing water bodies.

### **Way forward**

Jharkhand, with a composite score of 71, has been ranked as a 'Front Runner' category performance against India's average score of 66. Of the indicators constituting Goal 15, Jharkhand is performing well on all of them except one. It is expected to achieve the national targets quickly in line with the State's status. The indicator of concern is the percentage of degraded land over a total area of 16.56%, which needs to be brought down to 5.46% to achieve the national target.

**Table 17:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Target
Percentage of degraded land over total land area	16.56	27.77	5.46

Source: NITI Aayog, 2021

To restore the degraded lands in the state, the Government of Jharkhand needs to scale up its integrated watershed management program being implemented under the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY). Considering that the total land area of Jharkhand is 79,716 km<sup>2</sup>, the total land area that needs to be restored to achieve the national target is about 9,000 km<sup>2</sup> (i.e., 900,000 ha).

The Jharkhand State Watershed Mission, the nodal agency for implementing watershed management in the state needs to prepare a comprehensive project and submit it to the state government for funding. Jharkhand government should either explore options of financing the project under PMKSY or multilateral financing.









## SDG 16

# PEACE, JUSTICE, AND STRONG INSTITUTIONS

## PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS

### Overview

The 2030 agenda for goal 16 aims to promote peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable, and inclusive institutions at all levels. It is both an outcome and enables sustainable development. Achieving goals like ending poverty, ensuring education, and promoting economic growth becomes easier with peace, justice, and inclusion. SDG 16 calls for creating transparent, inclusive, and accountable institutions that establish poverty eradication and development systems to ensure representative decision-making at all levels.

While the COVID-19 pandemic has stalled the progress made by various SDGs, it has also affected the achievement of SDG 16. To progress on the 2030 agenda, effective and responsive governance initiatives need to be undertaken, interlinked with achieving the indicators of health, employment, and education. Effective recovery from COVID-19 requires that the different dimensions of SDG 16 be at the core of the recovery processes.

### SDG 16 has ten targets are:

**Target 16.1:** Significantly reduce all forms of violence and related death rates Everywhere

**Target 16.2:** End abuse, exploitation, trafficking, and all forms of violence against and torture of children

**Target 16.3:** Promote the rule of law at the national and international levels and ensure equal access to justice for all

**Target 16.4:** Significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organised crime

**Target 16.5:** Substantially reduce corruption and bribery in all their forms

**Target 16.6:** Develop effective, accountable, and transparent institutions at all levels

**Target 16.7:** Ensure responsive, inclusive, participatory, and representative decision making at all levels

**Target 16.8:** Broaden and strengthen the participation of developing countries in the institutions of global governance

**Target 16.9:** Provide legal identity for all, including birth registration

**Target 16.10:** Ensure public access to information and protect fundamental freedoms following national legislation and international agreements

**The two indicators are:**

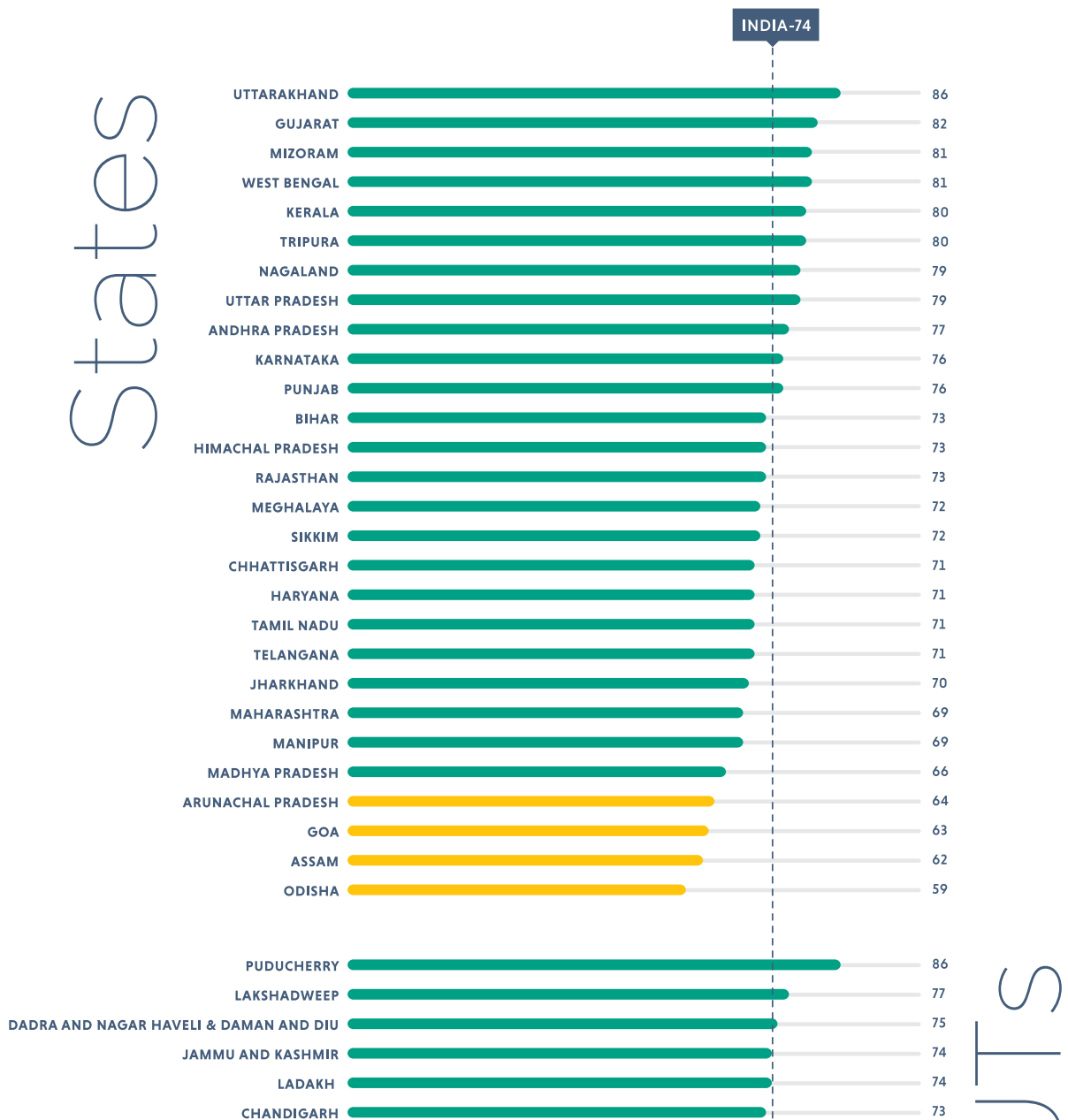
**Target 16.a:** Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime

**Target 16.b:** Promote and enforce non-discriminatory laws and policies for sustainable development

**Status and Performance of Jharkhand and India on SDG-16**

Jharkhand stands in the front-runner category with a score of 70 against India's average score of 74 in the NITI Aayog's SDG India Index 3.0 (NITI Aayog, 2021a). Jharkhand ranks 21<sup>st</sup> among all states and UTs in India for this SDG.

**Figure 8:** Index Score for Goal 16 of all States and UTs



Source: NITI Aayog, 2021

Table 18 shows that Jharkhand stands in the frontrunner category with a composite score of 71 against the India score of 66.

**Table 18:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Target
Murders per 1,00,000 population	32.95	24.56	33
Cognizable crimes against children per 1,00,000 population	0.29	0.51	2.74
Number of victims of human trafficking per 10 lakh population	16.56	27.77	5.46
Number of missing children per 1,00,000 child population	1.48	1.98	0
Number of courts per 1,00,000 population	Null	15	0
Cases under prevention of corruption Act and related sections of IPC per 10 lakh population	2.05	3.17	0.19
Percentage of births registered	85.6	89.3	100
Percentage of population covered under Aadhar	96	93.24	100

Source: NITI Aayog, 2021

### Scheme mapping & Critical Outcomes

Based on the targets of Goal 16, Table 19 maps all important State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 19 in appendix).

**The critical outcomes of the above mentioned schemes and programmes are:**

#### Capacity Building & Training

The state has undertaken several initiatives for strengthening the Panchayati Raj system, primarily by way of capacity building and training given to the elected representatives and key stakeholders, since the implementation of the Jharkhand Panchayati Raj Act, 2001. The Rajiv Gandhi Panchayat Sashaktikaran Abhiyaan (RGPSA) is an example for capacity building and training (CB&T) with focus on Gram Panchayat Development Plan (GPDP).

#### Rashtriya Gram Swaraj Abhiyan

The restructured centrally sponsored scheme of Rashtriya Gram Swaraj Abhiyan (RGSA) has a pragmatic focus for phased saturation mode on ensuring basic orientation training for the elected representatives of the Panchayats, within six months of their election and refresher training within two years. Under the scheme, 11,221 trainings were completed in FY 2018-19.

#### Integrated Child Development Services (ICDS)

The Integrated Child Development Services (ICDS) Scheme is one of the flagship programs that focuses on early childhood care and development particularly on hunger and malnutrition issues.

In Jharkhand, there are a total of 38, 432 AWCs. Among all the districts, Lohardaga has the lowest number of AWCs while Ranchi has the highest number of AWCs (749) followed by Kodarma (751).

#### Strengthening of the Anganwadi Centres (AWW)

The AWWs play an important and effective role in the implementation of the ICDS schemes at the grassroots level. The different components of the programme for their strengthening include:

- Provision of basic facilities including drinking water and toilets in existing AWCs,
- Upgradation of the existing buildings which are in need of renovation and maintenance.
- Increase of honorarium to Anganwadi workers and Anganwadi helpers

### Way forward

Jharkhand with a composite score of 70 has been ranked as a 'Front Runner' category performance in Goal 16. The state has recorded a below average performance while compared to India's standards and lies among the bottom 10 states.

**Table 20:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Target
Murders per 1,00,000 population	4.3	2.2	1
Cognizable crimes against children per 1,00,000 population	12.7	33.2	0
Number of victims of human trafficking per 10 lakh population	6.36	4.95	0
Number of missing children per 1,00,000 child population	2.71	16.41	0

Source: NITI Aayog, 2021

Keeping these indicators in view, rate of crimes against children including missing children and human trafficking, especially of women is most alarming. Since these are law and order issues, the state government needs to take strict actions particularly related to effective police functioning and judicial processes to ensure that actions against complaints and follow up is rigorous and time bound. Especially on indicators related to human trafficking and missing children, Jharkhand police may need to coordinate with neighbouring states to manage an effective policing and follow up action.







# performer category

5 GENDER  
EQUALITY



8 DECENT WORK AND  
ECONOMIC GROWTH



12 RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION









## SDG 5 GENDER EQUALITY

### ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

#### Overview

Sustainable Development Goal 5, 'Gender Equality,' aspires to end all discrimination against women and girls as a fundamental human right and a prerequisite for future societies. Providing equal access to quality education, health care, decent work and representation in the political and economic decision-making activity will ensure sustainable economies and benefit society at large. The goal also calls for ending all forms of discrimination, violence, trafficking and sexual exploitation of women and girls.

Although women have made significant progress in equal opportunities, several discriminatory socio-cultural practices exist. The COVID-19 pandemic has raised new hurdles for building an inclusive society by amplifying pre-existing gender gaps. Women in the current pandemic recession are affected by unemployment much more than men, as women have to face the brunt of additional domestic work and child care. It has possibly reduced work efficiency and raised the wage gap between men and women. In addition, one of the most troubling impacts of COVID-19 has been the terrifying surge in domestic violence due to the lockdown, so much so that the United Nations has called it the 'Shadow Pandemic'.

Another link between the pandemic and gender equality is the problem of child marriages (before the age of 18 years). Nearly 800 million girls have dropped out of school and engaged in domestic work during the pandemic, making them more susceptible to early child marriage. Owing to those mentioned above, this goal has nine targets to monitor gender equality and ensure the empowerment of women and girls by 2030.

The six "outcome-oriented targets" are:

**Target 5.1:** End all forms of discrimination against all women and girls everywhere

**Target 5.2:** Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation

**Target 5.3:** Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation

**Target 5.4:** Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate

**Target 5.5:** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

**Target 5.6:** Ensure universal access to sexual and reproductive health and reproductive rights as agreed following the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

**The three indicators are:**

**Indicator 5.a:** Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, following national laws:

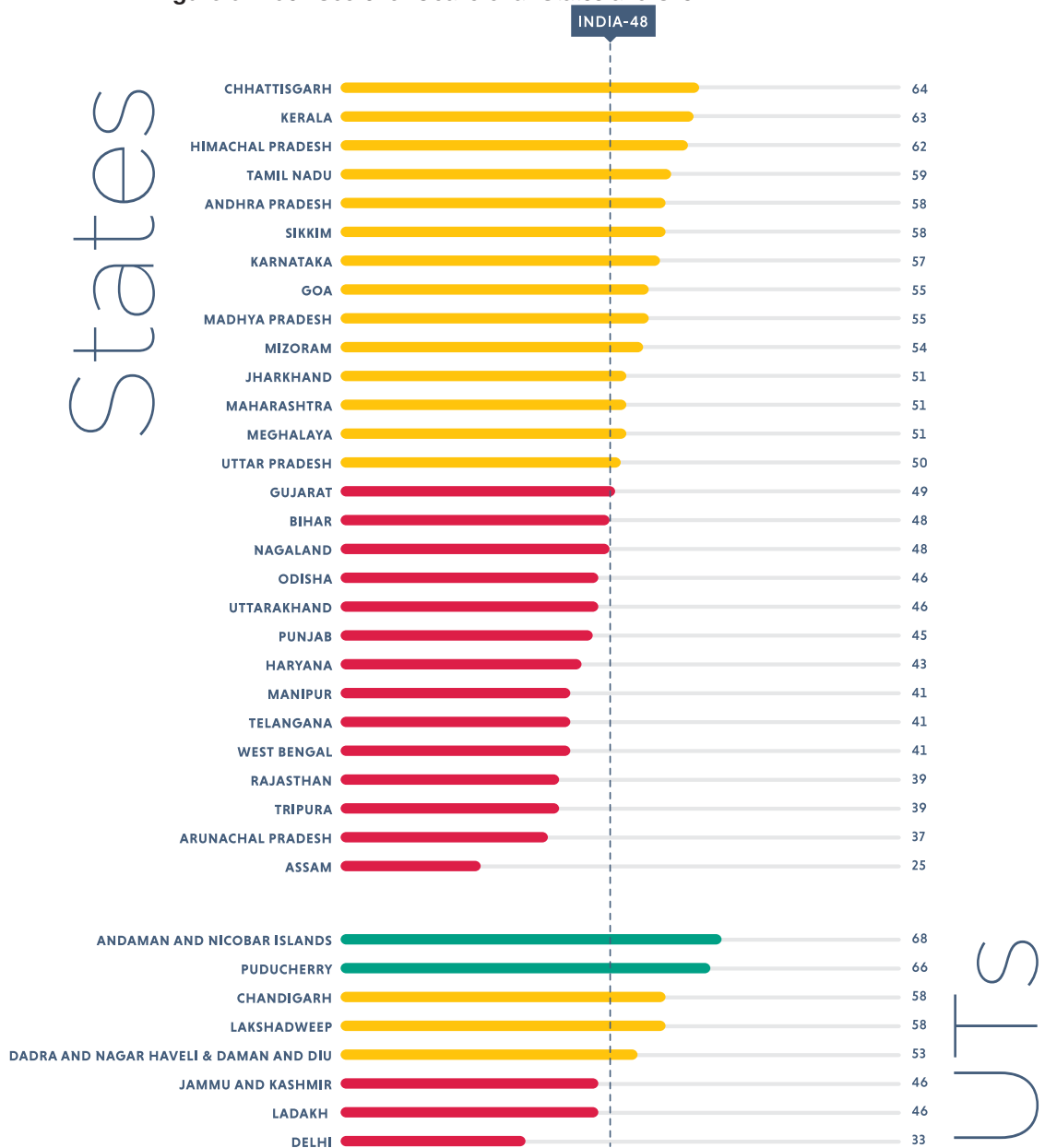
**Indicator 5.b:** Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

**Indicator 5.c:** Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

**Status and Performance of Jharkhand and India on SDG-5**

Jharkhand has achieved a composite score of 51 against India’s average score of 48 on the SDG India Index 3.0 and ranks among the better-performing states in the country and is categorized as a “Performer”.

**Figure 9:** Index Score for Goal 5 of all States and UTs



Source: NITI Aayog, 2021

The performance of the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 5 for the years 2020 is given in Table 21.

**Table 21:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Sex ratio at birth	923	899	950
Ratio of female to male average wage/salary earnings received among regular wage/ salaried employees	0.58	0.74	1
Rate of crimes against women per 1,00,000 female population	47.8	62.4	0
Per lakh women who have experienced cruelty/physical violence by husband or his relatives during the year	8.18	19.54	0
Percentage of elected women over total seats in the state legislative assembly	12.35	8.46	50
Ratio of female to male Labour Force Participation Rate (LFPR) (15-59 years)	0.28	0.33	1
Proportion of women in managerial positions including women in board of directors, in listed companies (per 1,000 persons)	229	190	245
Percentage of currently married women aged 15-49 years who have their demand for family planning satisfied by modern methods	63.8	72	100
Operational land holding gender wise (percentage of female operated operational holdings)	11.27	13.96	50

Source: NITI Aayog, 2021

Table 21 shows that Jharkhand state's performance is better than India average in the following indicators:

- Sex ratio at birth
- Rate of crimes against women per 1,00,000 female population
- Per lakh women who have experienced cruelty/physical violence by husband or his relatives during the year
- Percentage of elected women over total seats in the state legislative assembly; and
- Proportion of women in managerial positions including women in board of directors, in listed companies (per 1,000 persons)

On the other hand, the indicators that are faring poorly in Jharkhand as compared to the India average are:

- Ratio of female to male average wage/salary earnings received among regular wage/ salaried employees
- Ratio of female to male Labour Force Participation Rate (LFPR) (15-59 years)
- Percentage of currently married women aged 15-49 years who have their demand for family planning satisfied by modern methods
- Operational land holding gender wise (percentage of female operated operational holdings)

In view of these findings, we can conclude that Goal 5 is the one of the SDGs that significantly focus on the people's and community behaviour.

### **Scheme mapping & Critical Outcomes**

Based on the targets of Goal 5 Achieve Gender Equality and Empower All Women and Girls, Table 22 maps all important state and central government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 22 in appendix).

Jharkhand has achieved a composite score of 51 against India's average score of 48 on the SDG India Index 2020-21 and ranks among the better-performing states in the country and is categorized as a "Performer".

Jharkhand has introduced several schemes and projects for which the following outcome has been discussed from the Jharkhand Economic Survey 2021-22.

- Jharkhand is one of the few states to have constituted an Empowered Action Group (EAG) that works closely with vulnerable groups. Data from NFHS 5 (2019-20) reveals that only 61.7% of women are literate as opposed to 81.3% of men. The data also reveals that 26.2% of women have a Body Mass Index below average (BMI <18.5 KG/m<sup>2</sup>) in contrast to 17.1% of men in Jharkhand, indicating a more significant proportion of women are undernourished.
- Various central government schemes have been implemented in the state, such as the Women's Helpline Scheme, Beti Bachao Beti Padhao, and One Stop Centre in the state to promote social and economic empowerment of women; and to create awareness about the rights of women; and provide legislative support. In 2020-21 & 2021-22, the Government spent Rs. 3,402,745 in Jharkhand, covering 44486 beneficiaries under the Women's Helpline Scheme established in Ranchi. Similarly, Rs. 7,091,900 and Rs. 299,999,899 were spent in 24 districts of Jharkhand under the Beti Bachao Beti Padhao scheme and One Stop Centre, respectively.
- The state has also implemented the Mahila Shakti Kendra, which is a programme management unit at the state level under which the following activities are undertaken: Conducting orientation programs of the district officers/Zila parishad members, block level offices, panchayat members; Conducting sensitization-exercise for religious leaders, elected representatives; Conducting outreach activities, rallies, signature campaigns, Prabhat Pherri, organizing school competitions, film shows; and establishment of the Guddi Gudda Board in village panchayats.
- The Swadhar Greh Scheme (Scheme for women in difficult circumstances) is a scheme implemented by the Ministry of Women and Child Development that helps female victims of difficult circumstances who need support for rehabilitation. The scheme envisages adequate and safe housing accommodation by providing food, clothing and health facilities to victims needing care and protection.
- The state of Jharkhand has also executed some schemes for women empowerment using state funds that include: Project Tejaswini, which provides socio-economic empowerment to Adolescent Girls and Young Women (AGYW) in selected 17 districts of Jharkhand. It is done by ensuring the completion of market-driven skills training and secondary education for adolescent girls. As for the achievements, 11,67,317 AGYW have registered in Tejaswini clubs; out of them, 5,45,153 AGYW have been imparted life skills as of 2021 (Dept. of Women and Child Development & Social Security; GoJ, 2021). Under the Pradhan Mantri Matru Vandana Yojana (PMMVY), cash transfers have been provided of Rs. 16,74,55,000 in Jharkhand for pregnant and lactating women (19 years and above) in the year 2021-22. The scheme is a maternity benefit program run by the Government of India that issues cash transfers of Rs. 5000 in three instalments to the beneficiaries.
- Secondly, the Mukhya Mantri Kanyadan Yojana launched to provide grants to meet the wedding expenses of brides who belong to a household with an annual income of less than Rs. 72,000. The beneficiaries under this scheme receive Rs. 30,000 through DBT system when they get married. In terms of achievement, the district of Godda tops the list with 70-80% of beneficiaries receiving financial assistance, followed by Lohardaga and East Singhbhum with 60-70% of beneficiaries.
- Third, the Mukhyamantri Sukanya Yojana ensures the protection, education and secure prospects of the girl child who belongs to a family whose annual income is below Rs. 72000 per annum. However, implementation of this scheme has been slow. Other than Bokaro, Dumka and Gumla districts, the achievement of all other districts in this scheme is less than 50 percent.
- Under the scheme of Construction of Schools/ Rehabilitation Centres/ Hostels/ Home, the state government has built new special schools, rehabilitation centres, working women's hostels, old-age homes, after-care homes, observation homes and children's homes to provide shelter to elderly persons, widows, the destitute, trafficked persons and other beneficiaries urgently needing such shelters and educational institutions.

- Given the multi-dimensional needs of adolescent girls and to encourage them to go to school, GoJ has implemented a restructured Scheme for Adolescent Girls (SAGs) to address the issue of dropouts from school in the age group of 11-14 years. A package of nutrition components including Iron and Folic Acid (IFA) supplementation, Health check-up and Referral services and Nutrition and Health Education (NHE). Along with this, the scheme also includes non-nutrition components like Mainstreaming the out-of-school girls to join formal schooling, bridge course/skill training; Life Skill education, home management; and Counselling/ Guidance on methods to access public services. Adolescent girls' physical, mental and physiological needs have been considered while designing the services.

While all these schemes and projects focus on providing security and protection to women and girl children from any form of discrimination, violence and inequity, achieving the goal of gender equality and empowerment of all women and girl child is still a cherished but distant goal in the state for which not only the state government but also all people of the state will need to strive hard.

### Way forward

Jharkhand with a score of 51 is ranked as a “Performer” (SDG India Index-2020-21) against India's average score of 48. However, on a number of indicators, Jharkhand still has to make significant progress to attain the national targets.

**Table 23:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Targets
Ratio of female to male Labour Force Participation Rate (LFPR) (15-59 years)	0.28	0.33	1
Ratio of female to male average wage/salary earnings received among regular wage/ salaried employees	0.58	0.74	1
Operational land holding gender wise (percentage of female operated operational holdings)	11.27	13.96	50
Percentage of elected women over total seats in the state legislative assembly	12.35	8.46	50
Rate of crimes against women per 1,00,000 female population	47.8	62.4	0
Percentage of currently married women aged 15-49 years who have their demand for family planning satisfied by modern methods	63.8	72	100

Source: NITI Aayog, 2021

It is clear that all these indicators have immense socio-cultural and political dimensions, and concerted efforts must be taken to improve them. Improving the performance of these indicators will entail large-scale and deep-rooted social transformations related to cultural, political and gender values systems, attitudes and practices.

Also, the covid-19 pandemic has highlighted the need for swift action to address the gender inequality that remains pervasive globally and to get back on track for achieving gender equality. Women have played a critical role in responding to the pandemic as front-line health workers, caregivers, managers, and leaders of the response and recovery efforts. However, they remain underrepresented in critical leadership positions, and their rights and priorities often need to be explicitly addressed in those efforts. The crisis presents an opportunity to reshape and rebuild systems, laws, policies and institutions to advance gender equality.

The pandemic has only slowed down in its tracks the progress India was making towards achieving gender parity. The state urgently needs to focus on “health and survival” which points towards a skewed sex ratio because of a high incidence of gender-based sex-selective practices and women's economic participation. Women's labour force participation rate and the share of women in technical roles declined in 2020, reducing the estimated earned income of women, which is one-fifth that of men.





## SDG 8

# DECENT WORK AND ECONOMIC GROWTH

## PROMOTESUSTAINED,INCLUSIVEANDSUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

### Overview

Goal 8 – “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all” aims to promote sustained economic growth, higher productivity levels and technological innovation. Encouraging entrepreneurship and job creation are crucial, as are effective measures to eradicate forced labour, modern slavery and human trafficking. It also seeks to protect labour rights and promote policies which support decent job creation and safe and secure working environments. With these targets in mind, the goal is to achieve full and productive employment, and decent work, for all women and men by 2030.

Prior to the COVID-19 pandemic, young women were twice as likely as young men to not be participating in employment, education, or training, and the crisis is expected to further widen the gender gap among youth who are not in these activities. Nonetheless, the global economy is slowly recovering, although activity may remain below pre-pandemic levels for a prolonged period.

### SDG 8 has twelve targets. The ten “outcome-oriented targets” are:

**Target 8.1:** Sustain per capita economic growth following national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries

**Target 8.2:** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value-added and labour-intensive sectors


**Target 8.3:** Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

**Target 8.4:** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, following the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

**Target 8.5:** Achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

**Target 8.6:** Substantially reduce the proportion of youth not in employment, education or training

**Target 8.7:** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms



**Target 8.8:** Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

**Target 8.9:** Devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

**Target 8.10:** Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all

The two indicators are:

**Target 8.a:** Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-Related Technical Assistance to Least Developed Countries

**Target 8.b:** Develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization

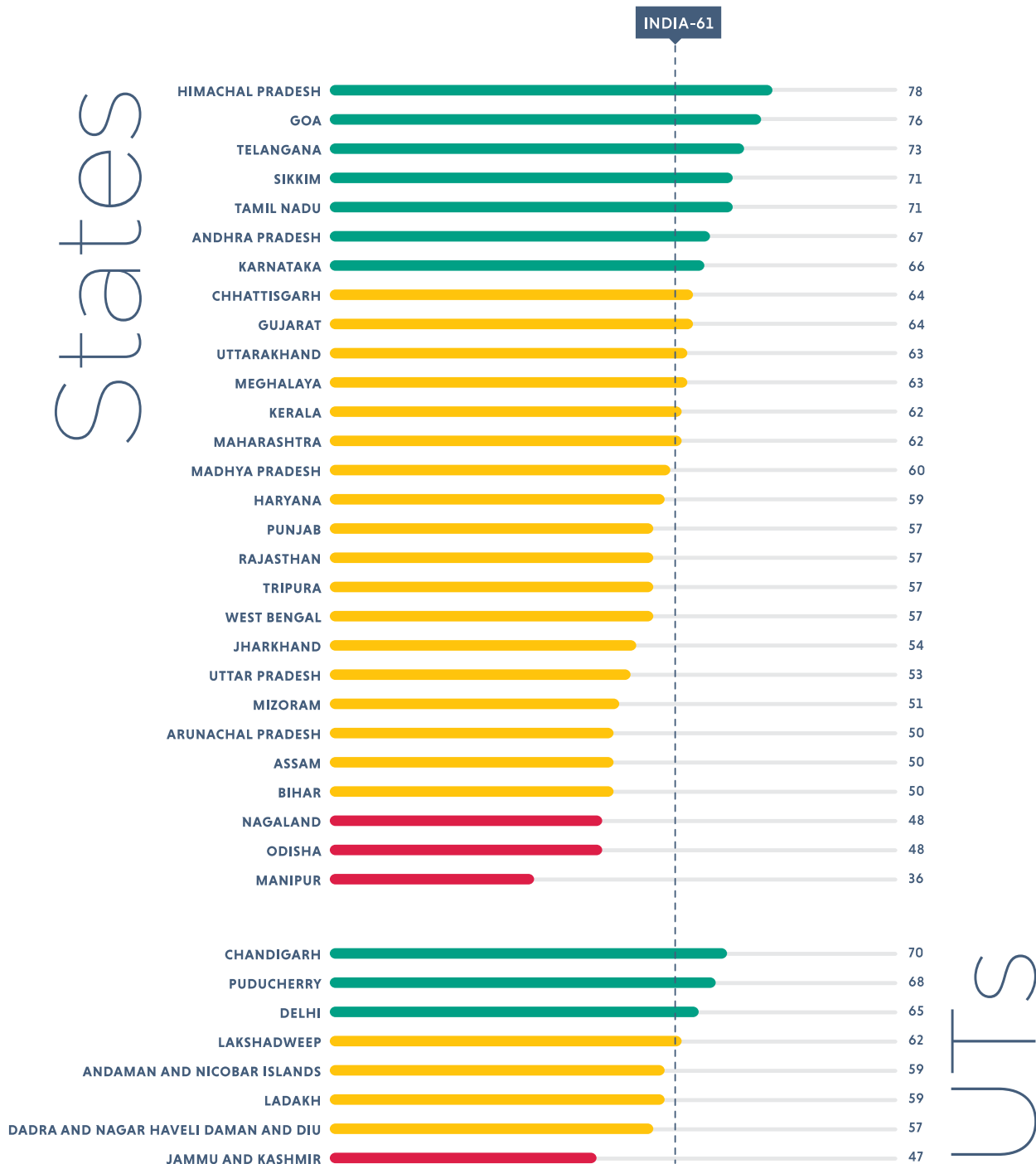


States

### Status and Performance of Jharkhand and India on SDG-8

Jharkhand has a composite score of 54 and has been ranked a “Performer” against India’s average score of 61. It also ranks among the lower-performing states in the country.

**Figure 10:** Index Score for Goal 8 of all States and UTs



Source: NITI Aayog, 2021

UTS

The performance of the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 8 for the year 2020 is given in Table 24.

**Table 24:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Annual growth rate of GDP (constant prices) per capita	5.30	5.1	7
Ease of Doing Business (EODB) Score (feedback score)	29.54	71	50
Unemployment rate (%) (15-59 years)	5.5	6.2	3
Labour Force Participation Rate (LFPR) (%) (15- 59 years)	50.5	53.6	68.3
Percentage of regular wage/ salaried employees in non-agriculture sector without any social security benefit	60.5	51.9	0
Percentage of households covered with a bank account under PMJDY against target	100	99.99	100
Number of functioning branches of commercial banks per 1,00,000 population	8.59	11.69	31.26
Automated Teller Machines (ATMs) per 1,00,000 population	9.55	17.31	42.65
Percentage of women account holders in PMJDY	55.74	55.34	50

Source: NITI Aayog, 2021

Table 24 shows that in several indicators, the performance of Jharkhand is poorer than the Indian average:

- Ease of Doing Business (EODB) Score (feedback score)
- Unemployment rate (%) (15-59 years)
- Percentage of regular wage/ salaried employees in a non-agriculture sector without any social security benefit
- Number of functioning branches of commercial banks per 1,00,000 population
- Automated Teller Machines (ATMs) per 1,00,000 population

In the other indicators, the performance of Jharkhand is comparable to that of the India average.

A comparison of the performance of the Jharkhand state on the Goal 8 indicators against the national targets shows that for the indicator Percentage of women account holders in PMJDY, Jharkhand has already achieved the national target and can quickly improve further over the following years by increasing coverage under the Pradhan Mantri Jan Dhan Yojana.

However, currently, Jharkhand is way behind the national target in the other indicators, namely:

- Annual growth rate of GDP (constant prices) per capita
- Ease of Doing Business (EODB) Score (feedback score)
- Unemployment rate (%) (15-59 years)
- Labour Force Participation Rate (LFPR) (%) (15- 59 years)
- Percentage of regular wage/ salaried employees in a non-agriculture sector without any social security benefit
- Number of functioning branches of commercial banks per 1,00,000 population
- Automated Teller Machines (ATMs) per 1,00,000 population

### **Scheme mapping & Critical Outcomes**

Based on the targets of Goal 8 Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All, Table 25 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 25 in appendix).

The critical outcomes of all these schemes and projects in the Jharkhand State for Goal 8 is reviewed below.

- Jharkhand is amongst the low-income states of the country. While its geographical area constitutes 2.4 percent of India and about 2.7 percent of its population lives here, its GSDP constitutes less than 2 percent of the country's GDP. However, the state has

made steady progress since its formation in November 2000. The GSDP of Jharkhand at the time of its formation was about Rs. 31 thousand crores at 1999-2000 prices. It grew at the average annual rate of 8 percent per annum in the first five years of its formation (between 1999-2000 and 2004-05), and stood at 6.2 percent between 2011-12 and 2018-19

- The growth rate of the state economy has decelerated during the last two years, i.e. in the financial years 2019-20 and 2020-21, due to COVID-19. As a result, the GSDP has been estimated to have grown to Rs. 2,38,395 crores in the financial year 2019-20 (P) and contracted by about Rs. 11 thousand crore – reaching Rs. 2,27,082 crores in the financial year 2020-21 (Pr.).
- The per capita income (per capita Net State Domestic Product or NSDP) of Jharkhand was Rs. 41,254 in the year 2011-12. It grew at an average annual rate of 9.0 percent at current prices and 4.5 percent at constant prices between 2011-12 and 2018-19. The state's per capita income in the year 2018-19, thus, was 75,421 at current prices and Rs. 56,133 at constant prices. It has been estimated to be Rs. 77,739 at current prices and Rs. 57,246 at constant prices in 2019-20; recording an annual growth of 3.1 percent and 2.0 percent, respectively. The state's per capita income is estimated to have contracted to Rs. 75,587 at current prices and Rs. 53,489 at constant prices in 2020-21.
- The Periodic labour force survey (PLFS), conducted by the National Sample Survey Organisation (NSSO), provides data regarding the country's labour market. As per the PLFS estimates, the Labour Force Participation Rate (LFPR) was 45.1 percent in 2017-18, and it increased to 55.9 percent in 2019-20. The unemployment rate decreased from 7.5 to 4.2 percent in the same period. It, however, increased sharply from April 2020 during the outbreak of COVID-19 and the lockdown. The unemployment rate decreased from 59.2 percent in May 2020 to 13.5 percent in September 2021
- The proportion of Regular Salaried Wage (RWS) workers out of the total number of workers is low, whereas the self-employed labour is very high in the period 2017-18 and 2019-20. It has also been observed that 9 percent of the workers engaged in economic activity in a principal capacity are also engaged elsewhere in a subsidiary capacity. The PLFS data also shows a decline in urban female labour force participation rate in all age groups between 2017-18 and 2018-19. On the contrary, there is a considerable increase in the rural female labour force participation rate, i.e., 42.5 percent for the age group 15-29 years, 55.4 percent for the age group 15-59 years and 49 percent for 15 years and above.
- It is found that in Jharkhand, the relationship between the level of education in years and the female LFPR gives an almost inverted U-shaped curve. In Jharkhand, the LFPR of the males is much higher than that of the females. It is because many of the women, because of their involvement in care activities, do not participate in any economic activity but mainly because their economic activities mostly remain unrecognised or under-recognised.
- As in the case of LFPR, the workforce participation rate (WFPR) of both the males and females in all the age categories is higher in the rural areas than in the urban areas in the state. Compared to the urban areas, the WFPR is high in the rural areas because of the same logic that the incidence of poverty is high in the rural areas, and the poor cannot afford to remain unemployed. According to the PLFS 2017-18, among all the workers who were engaged in the agricultural and allied sectors as principal activities, approximately 30.71 percent of them were engaged in other subsidiary activities.
- The unemployment rate is high in the urban areas for males and females in all age groups and all the years between 2017-18 and 2019-20. Unemployment is high among the age group of 15 to 29 years but decreases with an increase in age. Those in the lower age group wait longer for a suitable job, but with advancing age, they become desperate and compromise for less suitable jobs. Though the labour force participation rate (LFPR) is low among women, the unemployment rate is very high, especially among

those living in urban areas. In all three consecutive periods i.e., 2017- 18, 2018-19 and 2019-20, the rate of unemployment of the females living in the urban areas was higher than that of the males except among the 15-59 years age group during the years 2018-19 and 2019-20. In contrast, the unemployment rate of females in rural areas has been much less than that of their male counterparts for all these years, especially for the age group of 15-29.

- The COVID-19 pandemic has severely affected the conditions of the workforce in the state. It has disrupted trade, transport, supply chain, production, mobility of the workers and livelihood of millions of workers in the country and the state. Because of the disruption in economic activities, many workers lost their jobs. Unemployment reached its peak during the lockdown period.. As per the data provided by the CMIE, unemployment in Jharkhand was 10.6 percent in January 2020 and 11.8 percent in February 2020, i.e., before the outbreak of COVID-19 and the imposition of lockdown. Unemployment started soaring in Jharkhand after the imposition of the lockdown on March 23, 2020, and in the country after March 25, 2020.
- After the reduction in the cases of COVID-19 and subsequent relaxation in the lockdown, the situation of the labour market in Jharkhand has started improving. However, there is a substantial gender wage gap in the state's urban areas though it has remained low in the rural areas.
- About 1,176 lakh person days of employment were generated under the MGNREGA during the financial year 2020-21, when livelihood problems aggravated due to the distress migration caused by the COVID-19 pandemic. Rs. 2,268.35 crores were paid to the MGNREGA workers during the same financial year.
- During the financial year 2020-2021, about 44 lakhs demanded jobs, of which about 32 lakhs could obtain. Similarly, during the financial year 2021-2022 (as of January, 2022), about 34 lakh people have demanded jobs, of which about 28 lakhs have been provided to date. Employment generation has been increasing continuously in the State. At present, about 55 thousand families have already completed 100 days of employment in the financial year 2021-2022.

### Way forward

Jharkhand, with a score of 54 has a Performer status for Goal 8 (SDG India Index,2021). However, against India's average score of 61, Jharkhand ranks amongst the lower performing States in the country. Compared with its "Aspirant" status performance in Goal 1 – No Poverty and Goal – 2 – No Hunger, it becomes a matter of concern despite its "Performer" status.

The indicators on which Jharkhand is performing low and still have a distance to travel before reaching the national targets are listed below. These indicators relate to two factors, employment and financial inclusion.

**Table 26:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Targets
Unemployment rate (%) (15-59 years)	5.5	6.2	3
Labour Force Participation Rate (LFPR) (%) (15- 59 years)	50.5	53.6	68.3
Percentage of regular wage/ salaried employees in non-agriculture sector without any social security benefit	60.5	51.9	0
Ease of Doing Business (EODB) Score (feedback score)	29.54	71	50
Number of functioning branches of commercial banks per 1,00,000 population	8.59	11.69	31.26
Automated Teller Machines (ATMs) per 1,00,000 population	9.55	17.31	42.65

Source: NITI Aayog, 2021

Starting with the unemployment rate, Jharkhand needs nearly half its current rate to reach the national target. The adverse impact of the Covid-19 pandemic may have further deteriorated the employment rate, so the gap to the national target may have widened. At the same time, the state needs to increase its labour force participation rate for the age group 15- 59 years by 18% to reach the national target. That is an increase of nearly 36% from the current status discounting the adverse impact the Covid-19 pandemic may have

had on LFPR.

Poor performance in the indicator percentage of regular wage/ salaried employees in a non-agriculture sector without any social security benefit – 60% without any social security benefit, also shows that the regular wage/ salaried employees in non-agriculture sector created in the state is also of low quality. It indicated that only 40% of the state's regular wage/ salaried employees have social security while the remaining 60% are vulnerable despite wage/salary earnings. It is also likely that the Covid-19 pandemic would have worsened this situation. Jharkhand is not only performing poorer in comparison to India's average, but it also needs to travel a long distance to reach the national target of 0%, i.e. 100% of the regular wage/ salaried employees in the non-agriculture sector enjoy full social security benefits.

It implies that Jharkhand needs to generate more sustainable, high quality and secure jobs through its economic growth at a faster rate. The state GDP data shows that Jharkhand has shown a decent growth rate over the last few years (Government of Jharkhand, 2022). However, more is needed to create the requisite employment opportunities for reaching the national target. While wage employment generation under MGNREGS may be an immediate solution, especially as the state economy recovers from the Covid-19 pandemic, Jharkhand needs to plan for faster economic growth and development. It will be possible only if the state can attract increased economic investment, especially in the industry and services sectors, which are also its currently faster-growing sectors. It also needs to improve its economic infrastructure, such as transportation and communication infrastructure and services, financial inclusion and credit services, power and water connection and improvement in the knowledge and skills of the workforce through education and training.

However, in terms of Ease of Doing Business, the number of functioning branches of commercial banks per 1,00,000 population and automated teller machines per 1,00,000 population, Jharkhand is not only far behind on the national targets but also the Indian average. Hence, to move forward, the Government of Jharkhand, especially its Finance and Planning Department, needs to formulate new policies and schemes that will incentivize investors to come to the state to invest and accelerate growth. Since the competition for investments and growth resources is national, if not international, the Government of Jharkhand needs to formulate policies and schemes that will create a globally competitive investment environment and ecosystem in the state vis-à-vis other states and other global investment destinations.

Expanding banking outreach and expansion to financial services across the state is another area in which the state needs to accelerate performance. While schemes like Jan Dhan Yojana are doing their bit, for faster economic growth and development, financial services and access needs to grow beyond opening bank accounts and DTB facilities. Partnership with private financial sector, fintech and NBFCs under RBI regulation and monitoring may be considered by the state government beyond expanding the outreach of the public sector banking system for this. This is important also in ensuring that the non-regulated and informal/ illegal credit operators are controlled and restricted from usurping this space and victimizing the people. While public sector and public finance may be the facilitator and first mover for promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all in the state, engagement of and promoting private sector participation and investment will be critical in both reaching the national targets and achieving Goal 8.

As mentioned above, the adverse impact of the COVID-19 pandemic has been among the most severest on SDG Goal 8. The path to recovery from this debilitating impact on the state's economic growth and sustainable employment for all may require careful planning and intervention by the State Government at various levels, such as macro-economic and fiscal policies, scaling up of investment and finances, intervention in the money and labour market and supporting wide-ranging upgrading of social and economic infrastructure. Jharkhand may require a considerable infusion of capital investment, which will require effective participation of both public finance and private investment, including FDIs.





## SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

### ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION

#### Overview

One of the top priorities of the current times is to decouple economic growth from resource consumption. SDG 12, which seeks to achieve- “Responsible Consumption and Production” aims to find easy solutions that enable sustainable consumption and production patterns by 2030. Sustainable consumption entails that while responding to one’s basic needs, it is still possible to opt for options that ensure minimal impact on the global environment and future generations. Similarly, sustainable production refers to the producer’s responsibility not to exhaust the natural resources through tier production operations. Since the global population is expanding, it is very natural for our needs and demands to grow exponentially while our natural resources remain limited.

Unfortunately, the amount of waste being produced across the globe is only increasing, primarily due to economies’ reliance on linear production patterns. According to the UN, India is among the top 3 highest emitters of carbon dioxide and accounts for about 7% of global emissions. It is also home to 18 of the world’s population while only holding 4% of its water resources. Hence, Goal 12 aims to ensure sustainable consumption and production to manage resources efficiently.

One cannot ignore the fact that the global pandemic has adversely affected people’s lives worldwide. One of the critical COVID-19 developments has been regarding the effect of household consumption patterns (Blundell et al., 2020). While consumption was reduced for some, household consumption increased for many. In the initial days of the pandemic, the fear of COVID-19 consequences, mainly death, and illness, led to panic buying and stockpiling (Naeem, 2020). After the first months of the pandemic, one of the most visible indicators of consumer behaviour change was adopting cautious buying habits (Mehta et al., 2020). For instance, buying only essential commodities like groceries and medical kits against non-essential commodities like luxury goods. While the lockdown restricted movement in the outside world, online purchasing continued, indicating a strong desire to consume more. As a result, the demand for fresh food on online platforms surpassed the suppliers’ capacity to produce and deliver more. Therefore, the pandemic led to limited ideas of sustainable consumption and production.


Given those mentioned above, the following targets have been set to reach the national targets of sustainable consumption and production for the indicators set by NITI Aayog:

#### **SDG 12 has eleven targets. The five “outcome-oriented targets” are:**

**Target 12.1-** Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

**Target 12.2-** Achieve the sustainable management and efficient use of natural resources

**Target 12.3-** Halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses



**Target 12.4-** Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, following agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse impacts on human health and the environment

**Target 12.5-** Substantially reduce waste generation through prevention, reduction, recycling and reuse

**Target 12.6-** Encourage companies, substantial and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

**Target 12.7-** Promote public procurement practices that are sustainable, following national policies and priorities

**Target 12.8-** Ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

**The three indicators are:**

**Indicator 12.a-** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

**Indicator 12.b-** Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

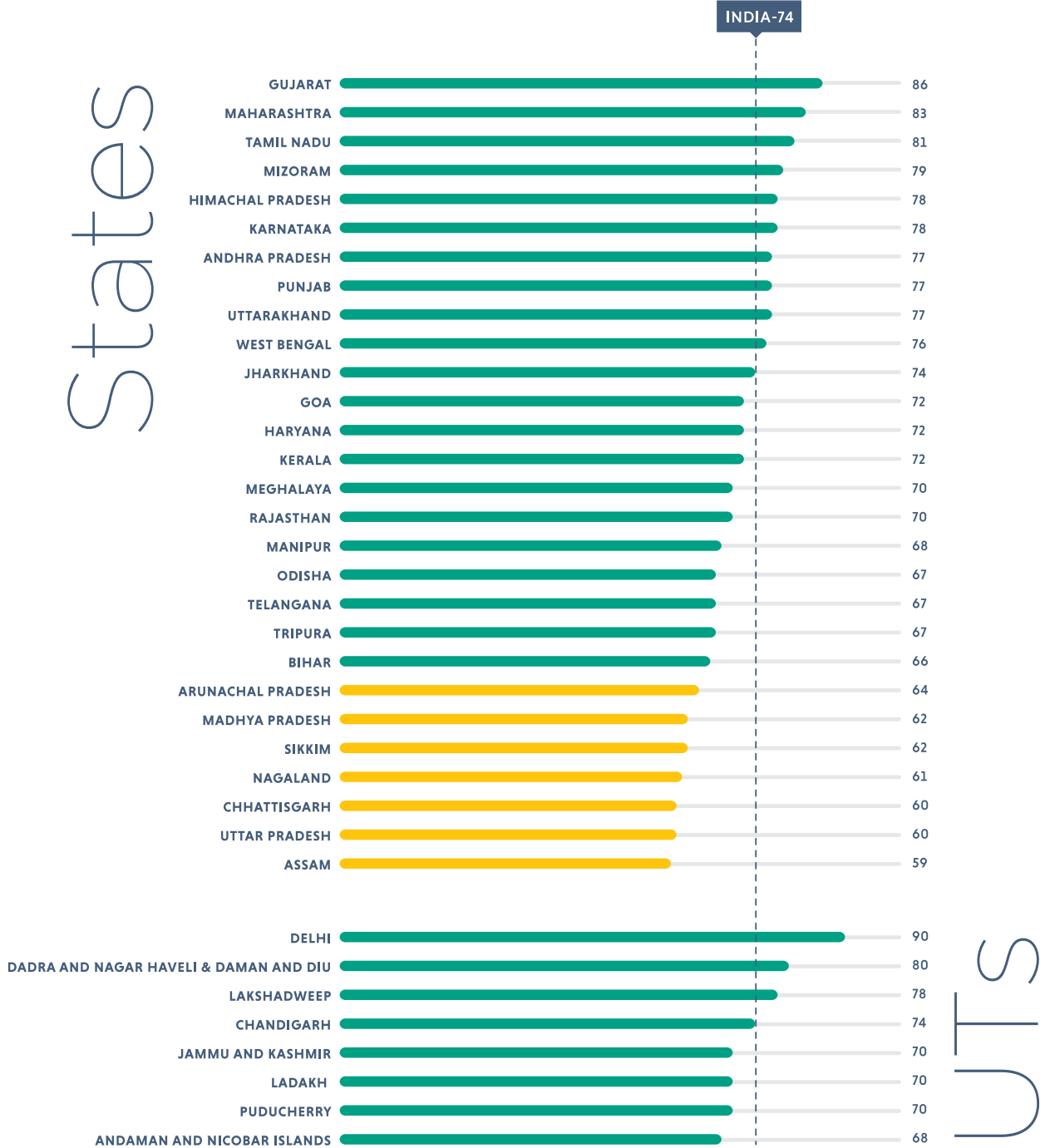
**Indicator 12.c-** Rationalise inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, following national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimising the possible adverse impacts on their development in a manner that protects the poor and the affected communities.



### Status and Performance of Jharkhand and India on SDG-12

Jharkhand, with a composite score of 55, has been ranked as a “Performer” against India’s average score of 74 (SDG India Index,2021). The state is ranked 27<sup>th</sup> among all the states in the country.

**Figure 11:** Index Score for Goal 12 of all States and UTs



Source: NITI Aayog, 2021a

The performance of the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 12 for the year 2020 is given in Table 27.

**Table 27:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Per capita fossil fuel consumption (in kg.)	103.4	157.3	64.1
Percentage use of nitrogenous fertiliser out of total N,P,K, (Nitrogen, Phosphorous, Potassium)	70.08	64.39	57
Hazardous waste generated per 1,000 population (Metric tonnes/ Annum)	13	8.09	4.04
Quantity of hazardous waste recycled/utilised to total hazardous waste generated (%)	2.06	44.89	100
Plastic waste generated per 1,000 population (Tonnes/ Annum)	1.39	2.54	1.27
Percentage of BMW treated to total quantity of BMW generated	52.55	86.91	100
Installed capacity of grid interactive bio power per 10 lakh population (MW)	0.11	7.62	21.81

Source: NITI Aayog, 2021

Table 27 shows that Jharkhand state's performance is poorer than India's average in four of seven indicators. These indicators include:

- Percentage use of nitrogenous fertiliser out of total N,P,K, (Nitrogen, Phosphorous, Potassium); Hazardous waste generated per 1,000 population (Metric tonnes/ Annum)
- Percentage of BMW treated to a total quantity of BMW generated;
- Installed grid interactive biopower capacity per 10 lakh population (MW).

Jharkhand stands at a much better position for the following indicators than India.

- Per capita fossil fuel consumption (in kg.),
- Plastic waste generated per 1,000 population (Tonnes/ Annum), and
- Installed capacity of grid interactive biopower per 10 lakh population (MW)

The state is falling behind all the targets except for the indicator of Plastic waste generated per 1,000 population (Tonnes/ Annum) where the state is only 0.12 points lower than the national target. The indicators that demand more attention to reaching the national targets by 2030 are:

- Per capita fossil fuel consumption (in kg.)
- Hazardous waste generated per 1,000 population (Metric tonnes/ Annum)
- Quantity of hazardous waste recycled/utilised to total hazardous waste generated (%) and
- Installed grid interactive bio power capacity per 10 lakh population (MW).

## Scheme mapping & Critical Outcomes

**Table 28:** Mapping of all Important Central and State Government Schemes and Projects by Concerned Line Departments

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Agriculture, Animal Husbandry and Co-operative Department (Animal Husbandry Division)	PAIR OX DISTRIBUTION SCHEME	NA	50	NA	Farmer will be facilitated 2 income generation

Source: Planning Department, Government of Jharkhand

The use of fertilizers is considered to be an important factor in contributing towards improved productivity. In Jharkhand, fertilizers like Urea, DAP, NPKS and MOP are used. Urea is the most important nitrogenous fertilizer because of its high nitrogen content, which is crucial for crop growth and development. However, the use of urea during the Kharif season has decreased by 17 per cent from 1,64,639 tonnes in 2020-21 to 1,36,963 tonnes in 2021-22 and also by 11 per cent during the Rabi season between 2018-19 and 2019-20. Di-ammonium Phosphate, popularly known as DAP, is a preferred fertilizer because it contains both Nitrogen and Phosphorus, which are primary macronutrients. The consumption of DAP has decreased by 22 per cent during the Kharif season between 2020-21 and 2021-22 and increased by 12 per cent during the Rabi season between 2018-19 and 2019-20. Urea is the most used fertilizer in the State, followed by DAP and NPKS.


### Way forward

Jharkhand, with a composite score of 55 has been ranked as a “Performer” on the SDG India Index 2021. However, despite its categorization, Jharkhand is ranked amongst the lowest-performing states on this goal in India. The indicators on which the State needs to show significant improvement are as follows:

**Table 29:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Targets
Per capita fossil fuel consumption (in kg.)	103.4	157.3	64.1
Installed capacity of grid interactive bio power per 10 lakh population (MW)	0.11	7.62	21.81
Hazardous waste generated per 1,000 population (Metric tonnes/ Annum)	13	8.09	4.04
Quantity of hazardous waste recycled/utilised to total hazardous waste generated (%)	2.06	44.89	100
Percentage of Bio-Medical Waste treated to total quantity of BMW generated	52.55	86.91	100

Source: NITI Aayog, 2021



In sustainable energy consumption, the state needs to reduce its per capita fossil fuel consumption from 104 kg to 64 kg, i.e., by nearly 40%. It will be possible only if the people in the state use more renewable energy or alternate fuel source to fossil fuel. Consequently, the state government needs to incentivize and promote renewable energy, such as solar and wind energy and the use of electric vehicles for public or private transportation. Several states in India have provided policy support and incentives to promote investment in such energy and fuel use for both generation/ production and consumption. Jharkhand government may also consider such policy and investment incentives to promote such use in the state. The state has vast potential for solar energy generation, thus the state needs to prioritize expanding renewable energy generation through policy provisions and incentives for investment.

The next set of Goal 12 indicators concern hazardous waste generation, including bio-medical waste and its safe management for recycling/utilization. These are hazardous waste generated per 1,000 population, the quantity of hazardous waste recycled/utilized to total hazardous waste generated and the percentage of Bio-Medical Waste treated to the total quantity of BMW generated. Waste management in Jharkhand currently needs to improve, as also seen under Goal 11. To accelerate improving performance in these waste management, safe treatment and recycling, the Jharkhand government will need to review targets, resources and fund allocations for schemes such as Swachh Bharat Mission – Urban and Swachh Bharat Mission – Grameen. The state government will need to strengthen the urban municipal and local bodies' capacity and gram panchayats for villages on managing waste, especially hazardous and bio-medical waste, which can be challenging to manage and have massive potential for environmental pollution and hazard to human health. Also, with infrastructure and management facilities, the government will need to make aware and train all the concerned people about safety practices and precautions and set up an efficient institutional system for its monitoring and regulation. The Jharkhand State Pollution Control Board will be the nodal agency to administer, regulate and monitor these activities.

Besides, the government may consider the involvement of the private sector in hazardous and biomedical water management, especially as private sector entities such as industries, hospitals and medical facilities will be generating such waste and need to practice state treatment and management at the sources





# Aspirant Category

1 NO  
POVERTY



2 ZERO  
HUNGER



4 QUALITY  
EDUCATION



9 INDUSTRY,  
INNOVATION, AND  
INFRASTRUCTURE



13 CLIMATE  
ACTION









## SDG 1 NO POVERTY

### END POVERTY IN ALL ITS FORMS EVERYWHERE

#### Overview

SDG 1 aims to eradicate poverty in monetary terms and in all forms and dimensions by 2030 (NITI Aayog, 2021). Poverty has attained a nuanced meaning by not just encompassing the lack of income and productive resources to ensure sustainable living. Still, its manifestations include malnutrition, limited access to education and healthcare, social discrimination, exclusion, and the lack of participation in decision-making. It mainly targets the most vulnerable by increasing essential resources and services and supporting communities affected by conflict and climate-related disasters.

Although significant progress has been made in reducing poverty throughout the country through national programs and schemes such as MGNREGA, PMJDY, and similar government programs, the country's unique geographical and socio-cultural diversity has made progress towards reducing poverty unequal. With the advent of COVID-19, poverty reduction has decelerated, and situations in many states have reversed. In fact, the economic fallout from COVID has resulted in increasing poverty globally in thirty years (UN, 2021).

#### **The goal has provided many indicators to measure the progress of poverty reduction.**

**Target 1.1.** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

**Target 1.2.** By 2030, reduce at least half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

**Target 1.3.** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

**Target 1.4.** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to essential services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

**Target 1.5.** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

#### **The indicators for the goal are as follows**

**Indicator 1.a.** Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.

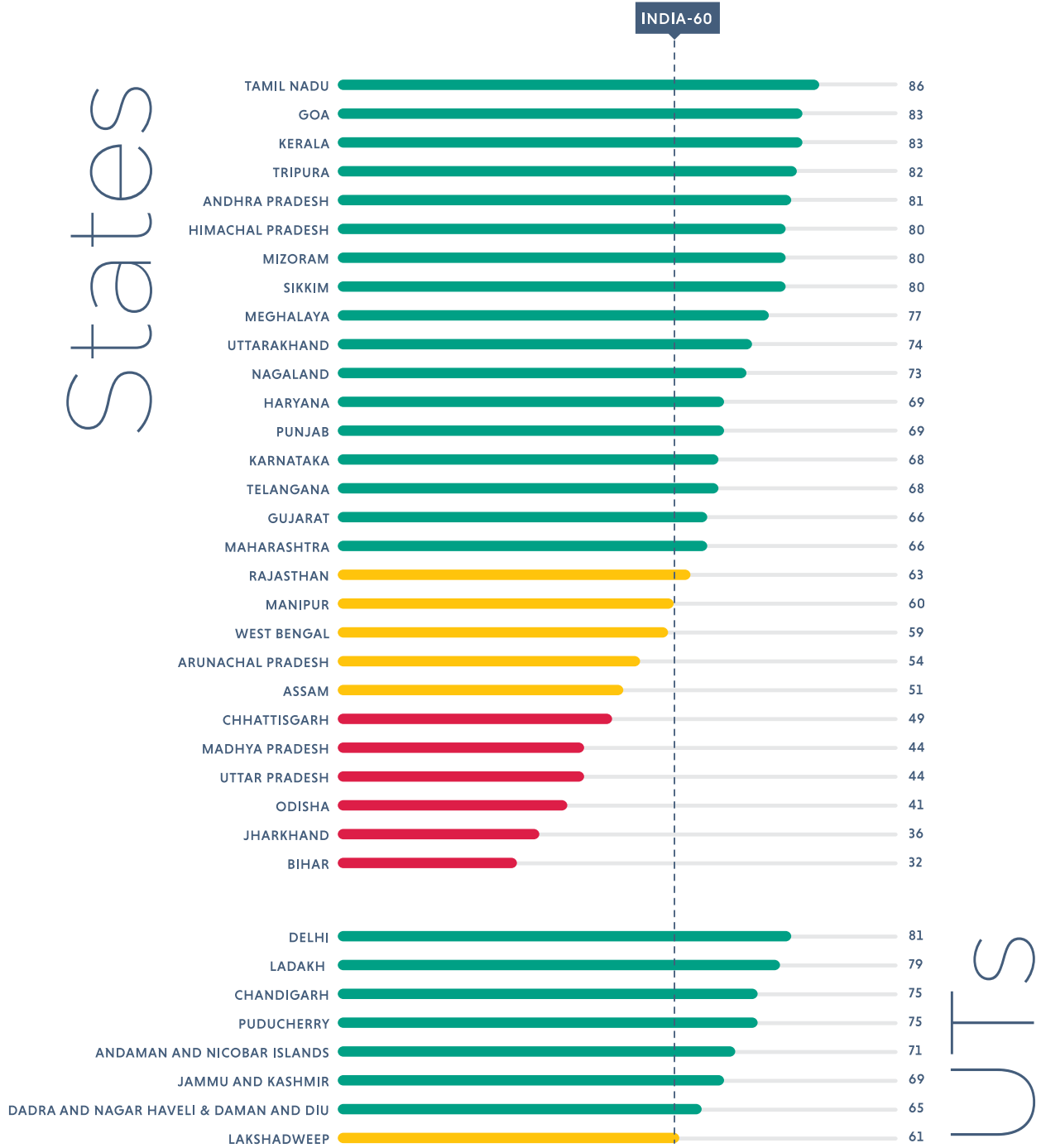
**Indicator 1.b.** Create sound policy frameworks at the national, regional, and international levels based on pro-poor and gender-sensitive development strategies to support accelerated investment in poverty eradication actions.

States

### Status and Performance of Jharkhand and India on SDG-1

Jharkhand, with a composite score of 36, against India's average score of 60, is ranked as an 'Aspirant' (SDG India Index, 2021). The following is the performance of the state in comparison to the other states in the country.

**Figure 12:** Index Score for Goal 1 of all States and UTs



Source: NITI Aayog, 2021a

SDG

The data for indicators used to assess the SDG India Index 3.0 scores for Jharkhand and India have been given in Table 30.

**Table 30:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets 2030
Population below poverty line (%)	36.96	21.92	10.96
MPI Head count ratio (%)	46.5	27.9	13.95
Households covered by health scheme/ insurance (%)	13.3	28.7	100
MGNREGA – Employment provided against demanded (%)	80.62	84.44	98.95
Beneficiaries under Pradhan Mantri Matru Vandana Yojana (%)	89.69	91.38	100
Households living in katcha houses (%)	6.6	4.20	0

Source: NITI Aayog, 2021a

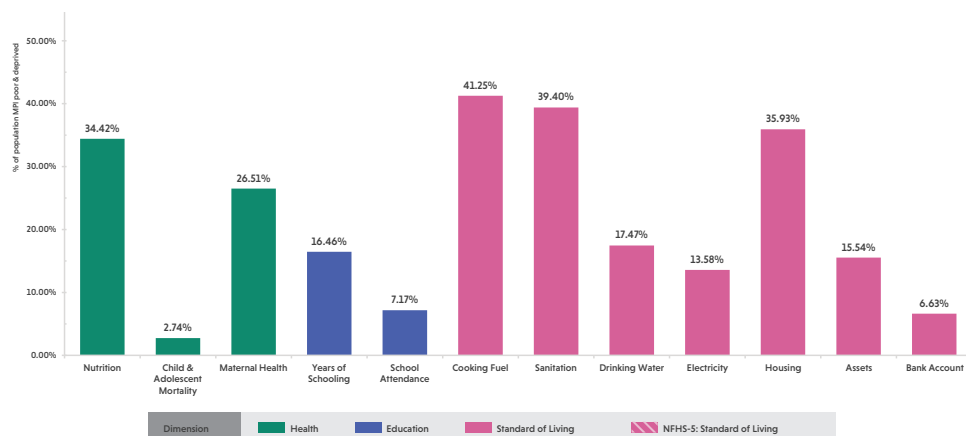
Poverty is complicated to understand; its reduction cannot be attributed or confined to a single dimension. Thus, NITI Aayog has identified five critical indicators that track the progress to understand the status of Jharkhand. Table 31 depicts that in Jharkhand, the five indicators show a poor performance against the India average and the National target, namely,

- Population below the poverty line (%)
- MPI Head count ratio (%)
- Households covered by health scheme/insurance (%)
- MGNREGA – Employment provided against demanded (%)
- Households living in Katcha houses (%).

Considering the continuing COVID-19 pandemic and its adverse global impact even after two years, there is an urgent need for the worldwide community and the decision makers to refocus policy actions and resource allocation to achieve the agreed SDG targets by 2030, which are (NITI Aayog, 2021). It will need extensive efforts to cover the distance to the targets by 2030.

NITI Aayog has recently published the India National Multidimensional Poverty Index Baseline Report (NITI Aayog, 2021b) based on the National Family Health Survey 2015-16. It reports the status of Jharkhand State as – Headcount Ratio (H) = 42.16%; Intensity (A) = 47.91%; and Multidimensional Poverty Index (HxA) = 0.202 (MPI, 2020). The Censored Headcount Ratio, i.e., the percentage of total population who are multidimensionally poor and deprived in each indicator in Jharkhand is given in Figure 13.

**Figure 13:** Percentage of total population who are multidimensionally poor across indicators

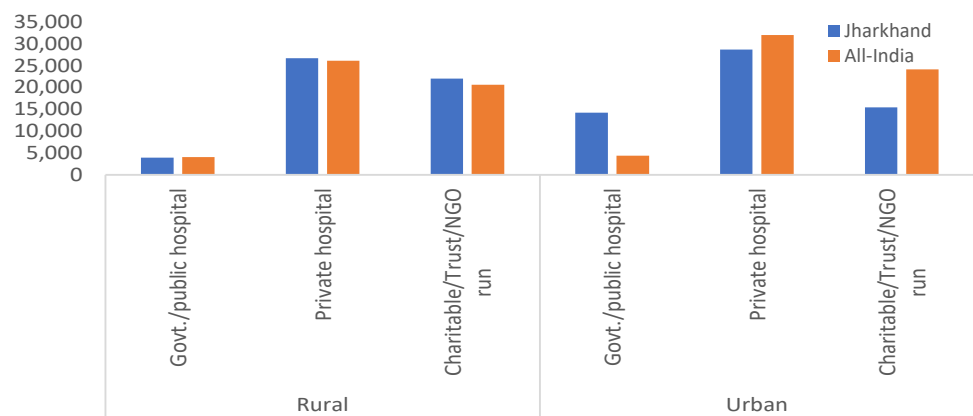


Source: Jharkhand Economic Survey, 2020-21

Figure 13 shows that five out of the twelve indicators have significantly censored more than 25 percent headcount ratios – nutrition, maternal health, cooking fuel, sanitation, and housing. Data from the NSS 2019 estimates reveal that only 2.2 percent of the urban population in Jharkhand was covered under some health insurance (Jharkhand Economic Survey, 2020-21). Out of which, 1.1 percent were covered by the government/ PSU as an employer, 0.5 percent were covered by employer-supported health protection (other than government/ PSU) and 0.5 percent were arranged by households with insurance companies. There was no coverage of schemes in the rural areas for health expenditure. (Jharkhand Economic Survey, 2020-21).

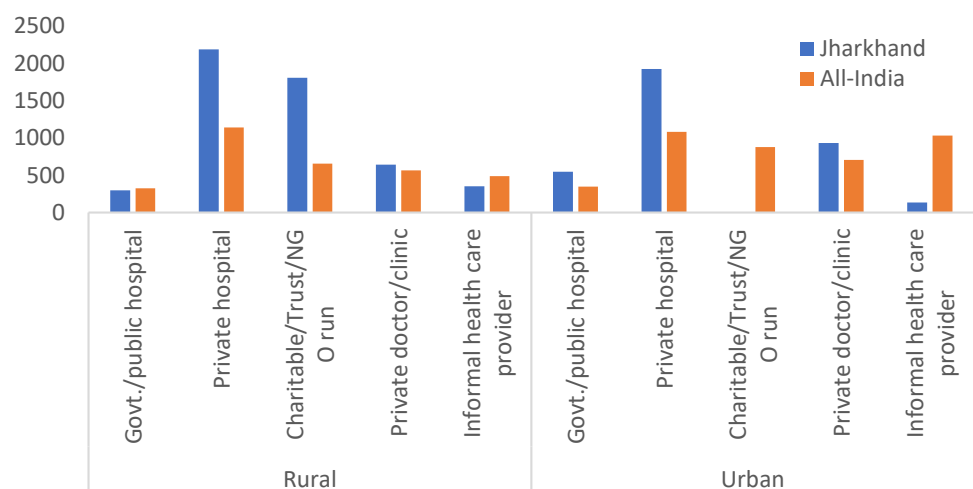
Lack of health insurance coverage is a double jeopardy for the poor in Jharkhand as it not only limits access to good health care but also leads to high out-of-pocket medical expenditure. Estimates for medical health expenditure reveal that the government spending on health and OOPME on health as a share of the total health-expenditure is 31 percent and 66 percent respectively in the State (Jharkhand Economic Survey, 2020-21). The average OOPME for in-patient and out-patient care in urban and rural areas by type of hospital is given in Figures 14 and 15.

**Figure 14:** Average Out-of-Pocket Medical Expenditure (OOPME) for In-Patient Care in Jharkhand



Source: NSS Report no. 586: Health in India, 2019

**Figure 15:** Average Out-of-Pocket Medical Expenditure (OOPME) for Out-Patient Care in Jharkhand



Source: NSS Report no. 586: Health in India, 2019

The Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) launched in 2018 by the Government of India in collaboration with Jharkhand Governments intends to reduce the high OOPME and save families from catastrophic health-expenditure in the State. The scheme provides a health cover of Rs. 5 lakhs for families living below the poverty line and the annual premium is contributed by the centre and the state governments in 60:40 ratio. Currently, a total of 57,10,933 families are covered under the scheme. From the above assessment it emerges that while Jharkhand faces the problem of poverty from multiple dimensions, the most critical of them all is related to health, nutrition and sanitation.

### **Scheme Mapping & Critical Outcomes**

Based on the multidimensional scope of SDG 1, End Poverty in All Its Forms Everywhere, Table 31 maps all-important Central and State Government schemes with the concerned line departments that contribute towards achieving the targets and indicators by 2030 (See Table 31 in the appendix).

- As mentioned above, NITI Aayog has assessed India's Multidimensional Poverty Index (MPI) in all its states using the data provided by NFHS-IV. The MPI, as calculated by the NITI Aayog, is a composite index of 12 indicators of deprivation of the people. These 12 indicators are nutrition, child and adolescent mortality, maternal health, years of schooling, school attendance, access to cooking fuel, sanitation, drinking water, electricity, housing, assets, and bank account. They are related to the three most important dimensions of human life – health, education and standard of living. It reports the status of Jharkhand State as – Headcount Ratio (H) = 42.16%; Intensity (A) = 47.91%; and Multidimensional Poverty Index (HxA) = 0.202 (MPI, 2020).
- According to the NITI Aayog assessment, deprivation in health has contributed about 40 percent to the multidimensional poverty of Jharkhand; another 40 percent has been attributed to 'Deprivation in the Standard of Living' and about 20 percent to 'Deprivation in the Educational Indicators.' Among all the indicators, 'Poor Nutritional Status' has been Jharkhand's leading contributor to multidimensional poverty, and it has contributed about 28 percent to the multidimensional poverty of the state. About 48 percent of the people and 34 percent of the multidimensional poor belong to nutritionally deprived households. 'Maternal Health' and 'Years of Schooling' are the other two essential indicators which have made a sizable contribution to the MPI of the state – they have contributed to the extent of 10.9 percent and 13.6 percent, respectively, to the MPI of the state.
- A large percentage of people are deprived of the facilities related to the standard of living. However, since their weight is low, their contribution to the MPI of the state is relatively low. Persons belonging to 82 percent of the households (41 percent censored) do not have cooking fuel, 75.4 percent of the households (39.4 percent censored) do not have proper sanitation facilities, 31 percent of the households (17.47 percent censored) do not have access to safe drinking water, and 61.8 percent of the households (35.93 percent censored) do not have proper housing facility.
- There is also a wide spatial variation in the incidence of poverty in the state. The incidence of poverty is much less in urban areas in comparison with that in rural areas. The districts which are more urbanized and are home to the industrial, mining and commercial centres have a lower incidence of poverty than those which are less urbanized and devoid of such centres. The region stretching from the east to the southeast comprising the districts of Dhanbad, Bokaro, Ramgarh, Ranchi, and East Singhbhum has the lowest incidence of poverty in the state. Poverty is very high in the north-western, north-eastern and southern parts of the state. A very high incidence of poverty has been found in the Sahibganj, Pakur, Chatra and West Singhbhum.

- There is a wide disparity in the incidence of poverty in Jharkhand's rural and urban areas. Rural poverty is the highest in West Singhbhum (64.13 percent) and the lowest in Ramgarh district (37.12 percent). Urban Poverty, on the other hand, is the highest in Pakur (48.76 percent) and the lowest in Palamau (6.33 percent). The disparity in rural poverty is not as high as that in urban poverty. While the difference between the highest and lowest incidence of poverty is as high as 42.2 percentage points in the urban areas, it is as low as 27.01 percentage points in the rural areas.
- Much progress, however, has been made in these indicators after the data for the fourth round of NFHS was released, based on which the baseline report of MPI has been prepared. Many families in the state have been given gas cylinders under the scheme of Ujjwala Yojana. The government of Jharkhand has given double cylinders to the beneficiaries of this scheme. The housing problem for low-income families has been resolved through 'Pradhan Mantri Aawas Yojana' and sanitation through the 'Swachh Bharat Mission'. The coverage of schooling and healthcare facilities has also increased in the last five years. The indicators of 'access to safe drinking water' and 'electricity' have also shown marked improvement. The ICDS, Mid-day Meal and National Nutrition Mission have improved the nutritional status of the children in the state. Thus, the 'Multidimensional Poverty Index Report' based on the data of NFHS-V (2019-20) is expected to show a sharper reduction in multidimensional poverty in Jharkhand.

#### **Way forward**

The state can take up the following steps/suggestions to Improve Jharkhand's performance on these indicators:

##### **(i) Population below the poverty line (%):**

- Implementation of targeted poverty alleviation programs such as direct cash transfers, food subsidies, and job creation schemes
- Promoting inclusive economic growth by supporting small businesses, agriculture and other sectors
- Improving access to quality education and healthcare

##### **(ii) MPI Head count ratio (%):**

- Addressing the root causes of multidimensional poverty, including lack of access to basic services and assets
- Increasing investment in rural areas to create job opportunities and improve infrastructure
- Providing support for vulnerable groups, such as women and children, through targeted programs

##### **(iii) Households covered by health scheme/insurance (%):**

- Promoting awareness about the importance of health insurance
- Expanding access to affordable health insurance for all citizens
- Improving the quality of healthcare services, including increasing the number of healthcare facilities and trained personnel

##### **(iv) MGNREGA – Employment provided against demanded (%):**

- Improving the implementation and delivery of the MGNREGA program
- Encouraging greater participation of women and marginalized groups
- Increasing transparency and accountability in the program through regular monitoring and evaluation

**(v) Households living in Katcha houses (%):**

- Increasing investment in rural housing, including providing subsidies for low-income families
- Improving access to finance for rural households to support housing construction
- Implementing awareness campaigns to encourage the use of sustainable building materials and techniques.
- Effective and timely implementation of all these schemes and projects with saturation coverage of all their intended beneficiaries will help achieve Goal 1, End Poverty in All Its Forms Everywhere, in the State by 2030. For this to happen, the State Government needs to make available the required financial resources and human expertise for all these schemes and projects with priority. It also needs to put in place a progress (output and outcome) monitoring system and a public grievance and perception monitoring system to ensure effective performance management.









## SDG 2 ZERO HUNGER

### END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

#### Overview

SDG 2 commits all countries to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture. As per the 2030 agenda, the objective is to end all forms of hunger and malnutrition by 2030 to ensure that all people, especially young children have sufficient and nutritious food by that year. Goal 2 aims to enhance sustainable agriculture and ensure access to land, technology, and markets for small farmers by promoting infrastructure investment to enhance productivity and improve climate conditions through sustainable agriculture.

While hunger has been a concern even before the pandemic, the onset of COVID-19 has only aggravated child malnutrition. A total of 149.2 million children below the age of 5 suffer from stunting (low height for age) on a global scale. In 2020, wasting (low weight for height) severely impacted almost 6.7 percent (45.4 million) of children below the age of 5. Wasting is foreseen to be one of the health conditions most impacted by COVID in a short period, as almost 15 percent more children are expected to be victims of wasting due to poor financial conditions of the households. Hence, it can be said that the pandemic has given rise to vulnerabilities, pushing between 83 and 132 million more people to suffer from chronic hunger and malnourishment in 2020.

#### **SDG 2 has eight targets. The five “outcome-oriented targets” are:**

**Target 2.1:** By 2030, end hunger and ensure access by all people, in particular, the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round

**Target 2.2:** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons

**Target 2.3:** By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment

**Target 2.4:** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and progressively improve land and soil quality

**Target 2.5:** By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed

**The three indicators are:**

**Target 2.a:** Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular, least developed countries

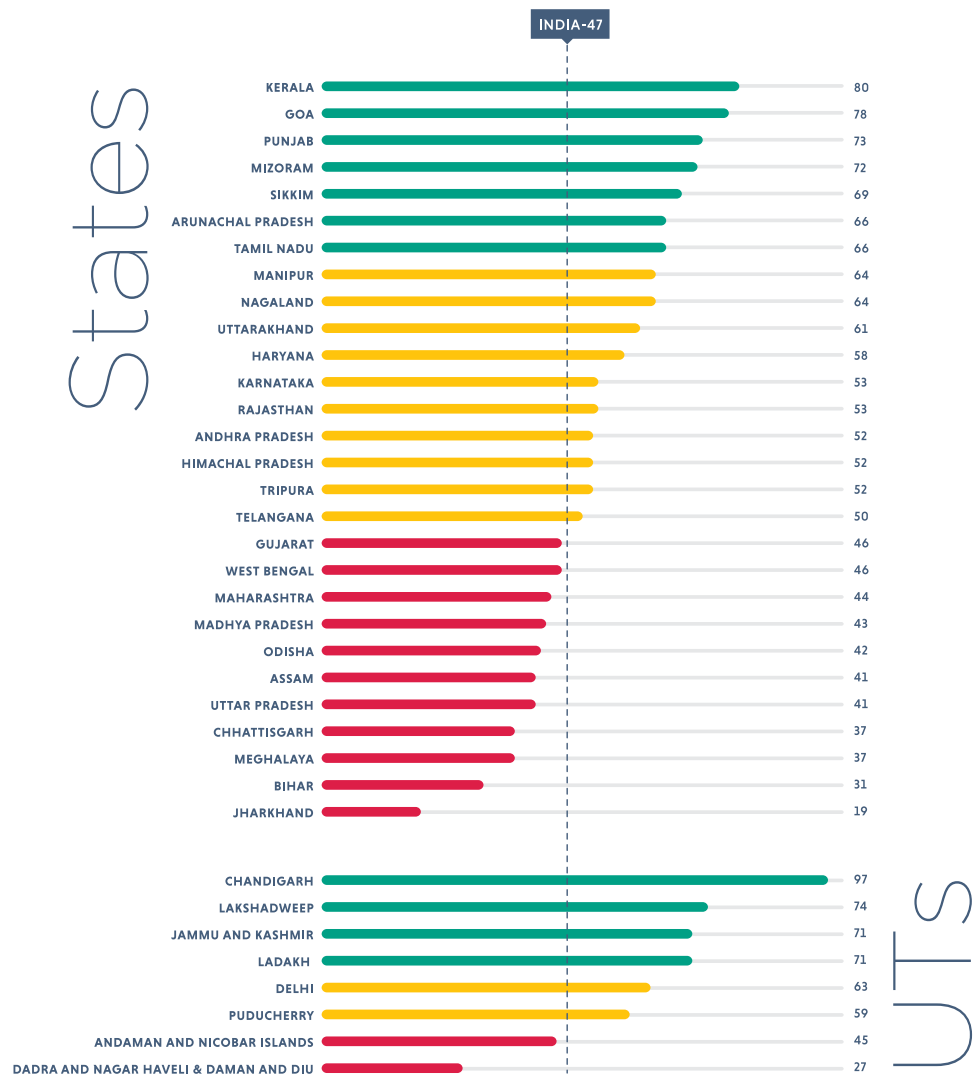
**Target 2.b:** Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, following the mandate of the Doha Development Round

**Target 2.c:** Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility

**Status and Performance of Jharkhand and India on SDG-2**

Jharkhand, with a composite score of 19 is ranked in the ‘Aspirant’ category and among the bottom performers of all the states in India. The average score of India is 47 on this goal. The following is the performance of India in comparison with all the states.

**Figure 16:** Index Score for Goal 2 of all States and UTs



Source: NITI Aayog, 2021

The performance of the state on the indicators for Goal 2 for the year 2020 is given in Table 32.

**Table 32:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Targets
Percentage of beneficiaries covered under National Food Security Act (NFSA),2013	77.80	99.51	100
Percentage of children under five years who are underweight	42.9	33.4	1.9
Percentage of children under five years who are stunted	36.2	34.7	6.0
Percentage of pregnant women aged 15-49 years who are anaemic	62.6	50.4	25.2
Percentage of adolescents aged 10–19 years who are anaemic	34.0	28.4	14.2
Rice and wheat produced annually per unit area (kg/ha)	1890.35	2995.21	5322.08
Gross Value Added (constant prices) in agriculture per worker (in Lakhs/ worker)	0.31	0.71	1.22

Source: NITI Aayog, 2021

Table 32 shows that Jharkhand state's performance is poorer than India's average in all indicators except for 'Percentage of children under five years who are stunted', where the difference is only 1.5 percentage points. However, the indicator performance is overall poor for the India average too. The indicators for which there is a significant difference include:

- Percentage of beneficiaries covered under the National Food Security Act (NFSA), 2013
- Percentage of children under five years who are underweight
- Percentage of pregnant women aged 15-49 years who are anaemic
- Rice and wheat produced annually per unit area (kg/ha) and
- Gross Value Added (constant prices) in agriculture per worker (in Lakhs/ worker).

The NITI Aayog's SDG India Index 3.0 (NITI Aayog, 2021a) also demonstrates the agreed national targets for these indicators to be achieved by 2030 in Table 32. A comparison of the performance of the Jharkhand state on the Goal 2 indicators against the national targets shows that the state is falling behind all of them and needs to cover many grounds to meet them by 2030. The indicators providing the significant challenges are the ones related to improving nutrition

- Percentage of children under five years who are underweight
- Percentage of children under five years who are stunted
- Percentage of pregnant women aged 15-49 years who are anaemic and
- Percentage of adolescents aged 10–19 years who are anaemic

As mentioned in the earlier section, Goal 2 is one of the SDGs most adversely impacted by the COVID-19 pandemic, showing indications of reversing gains made by the targets during the pre-pandemic period. Moreover, although the Central and Jharkhand governments have taken several steps and initiated schemes for relief and rehabilitation of the people most adversely impacted by the COVID-19 pandemic for ensuring food security, its long-term consequences are still to be understood. They may manifest in the next couple of years, especially as the pandemic continues.

### Scheme mapping & Critical Outcomes

Based on the targets of Goal 2, Table 33 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 33 in the appendix).

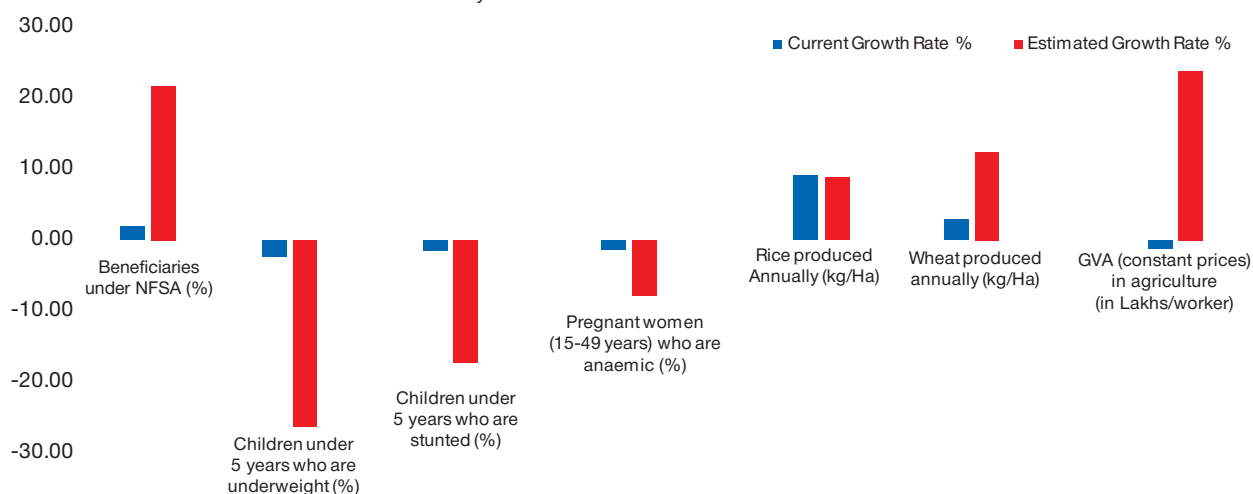
- In recent years, the Government of Jharkhand has ensured food and nutrition security of utmost importance to reduce hunger and malnutrition in the state. The improvements indicate a significant growth in food availability, accessibility and utilization mechanisms in the state. The essential outcomes for the schemes mentioned above and interventions in Jharkhand state have been reviewed below, as in the Jharkhand Economic Survey, 2021.

- Since its formation in 2000, Jharkhand has progressively improved in almost all parameters that ensure food and nutritional security for its population. Data reveals that more than 44 lakh tonnes of rice were produced in 2021-22. For the same financial year, Paddy procurement was nearly 6.28 lakh tonnes which helped 1.04 lakh farmers of the state. In addition, pulses, wheat, oilseeds and millets are essential for nutritional benefits. In 2016-17, the production of pulses, wheat, oilseeds and millets in the state was 8.43 lakh tonnes, 4.25 lakh tonnes, 2.64 lakh tonnes and 0.22 lakh tonnes, respectively. However, this declined in 2018-19, but increased to 9.35 lakh tonnes, 5.23 lakh tonnes, 4.16 lakh tonnes and 0.17 lakh tonnes, respectively, in 2020-21.
- The state has also seen a massive expansion in the production of protein-rich foods like eggs, milk, and meat. In Jharkhand, food production has increased over time and reached nearly 23.21 lakh tonnes in 2019-20. This hike is also observed in Meat, egg and fish production by 67 thousand tonnes, 69.28 crores and 6.02 lakh tonnes of production, respectively.
- To ensure food and nutrition security of the underprivileged and deprived sections, The National Food Security Act (2013) implemented through the Public Distribution System plays a critical role in the regular distribution of food at affordable prices. The food is provided to those beneficiaries who hold a ration card through Fair Price shops that have been licensed by order under Section 3 of the Essential Commodities Act, 1955. The Jharkhand Economic Survey (2021-22) shows that 25,483 fair shops in Jharkhand are currently operating.
- Under the Public Distribution System, the beneficiaries are given ration cards to purchase subsidised food grains from the fair price shops. In Jharkhand, there are four types of PDS beneficiaries. Among the Below Poverty Line category, there are pink cardholders (Priority Households – PHH), Yellow cardholders (Antyodaya Yojana – AAY) and Green card holders (introduced for those who are eligible but not covered under PHH and AAY). For those belonging to the Above Poverty Line category, a white ration card is issued to each beneficiary (annual income exceeds Rs. 1 Lakh).
- Jharkhand consists of about 58.88 lakh cardholders under the Priority Households (PHH) and the Antyodaya Yojana (AAY) that cover more than 2.63 crore family members who are provided rice, wheat, kerosene oil, salt and sugar at subsidized prices. 5kg of food grains is given to each beneficiary at a subsidized rate under the PHH scheme, and for the AAY scheme, 35kg of food grains per household is provided. In addition, under the Annapurna Yojana, 10kgs of rice per beneficiary every month is distributed free of cost to 49,371 persons. The beneficiaries of this scheme include people above 60 years of age who are eligible for the Indira Gandhi Old Age Pension Scheme but are not getting the benefits.
- The State Government (GoJ) is implementing the Mukhya Mantri Dal Bhat Yojana, under which a full meal at Rs. 5/- is provided to the poor and needy. Presently, 377 Dal Bhat centres are functioning all over the state that provides meals during the daytime, and eleven such centres are also functioning to provide food during the night.
- COVID-19 has severely impacted food security due to the increase in unemployment and loss of income. Jharkhand, alongside the Government of India, in order to mitigate these concerns, introduced food relief schemes such as the distribution of 2 Kg Chura (Flattened rice), 500gm Gur (Jaggery) and 500gm Chana (gram), to the needy people during COVID- 19. The Jharkhand government aimed to ensure food availability to 5000 people in Ranchi and 2000 people per district in the other 23 districts. The government also started four types of centres, in addition to the previously functioning 377 dal bhat centres, which are:
  - Vishesh Dal Bhat Centres – Total 361 centres were authorised to provide food to 200 people for free of cost.
  - Vishisht Dal Bhat Centres – 498 centres were sanctioned on the same model to provide food-security to the needy people during the COVID- 19 pandemic

- Atirikt Dal Bhat Centres- 382 centres were set up at the Thana (Police Station) level after lockdown to provide food to 200 people for free of cost.
- Pravasi Majdoor Dal Bhat Centres- 94 centres were set up on the national and the state highways to provide one-time food for the people on their way home.
- The Atma Nirbhar Bharat Scheme provided 10kg rice per person, free of cost, to migrants and other needy people who were not eligible to be covered under the NFSA. The scheme ensured that the state government provided sufficient food grains to the poor. PMGKAY was introduced under the Pradhan Mantri Garib Kalyan Package (PMGKP) to provide the required assistance to the poor to fight against COVID-19. Every person eligible under the National Food Security Act 2013 was provided with an additional free-of-cost 5 kg of grains (wheat or rice), along with the already sanctioned 5 kg of subsidized food grains through the Public Distribution System.
- Additional efforts were made from the government's end by introducing the Jharkhand State Food Security Scheme in January 2021. The scheme provides food assistance to 15 lakh beneficiaries who are not covered under the National Food Security Act, 2013 by providing them with 5 kg rice per beneficiary per month at a subsidized rate of Rs.1 per kg. The scheme also provided green ration cards to the beneficiaries. Hence, while COVID-19 could have left the state of Jharkhand with a triggering impact on food insecurity, the various relief measures implemented by the State and Central Governments have reduced the risk of food insecurity for the vulnerable population.

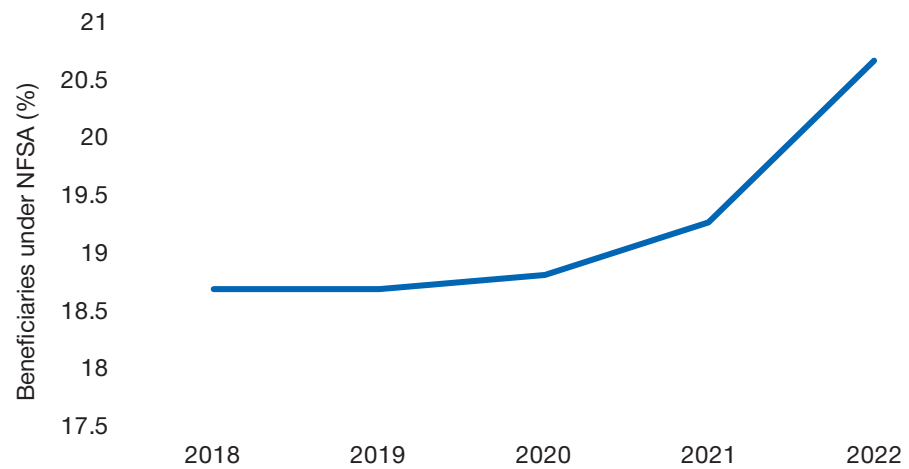
### Projections

According to the Global Hunger Index (GHI) 2021 report, India stands at the 101st position among 116 countries with a score of 27.5, a level that falls in the severe category. It is reported that 15.3% of children in India are undernourished, 17.3% of children are wasted under five years of age, 34.5% of children under five are stunted, and nearly 3.4 % of children die before age 5. The state of Jharkhand has always been plagued with extreme hunger and malnutrition that has further worsened due to the COVID-19 pandemic. Malnutrition is among the worst manifestations of food and nutrition insecurity and is considered among the most devastating factors for human development. The current data (SDG, 2021) indicates that Jharkhand is among the bottom-performing states in the country for SDG 2 and may not be able to achieve the required goal by 2030. Therefore, this chapter puts forth the current status of Jharkhand to understand the prevalence of hunger while analyzing the progress made in Jharkhand on food security and nutrition over the last few years.



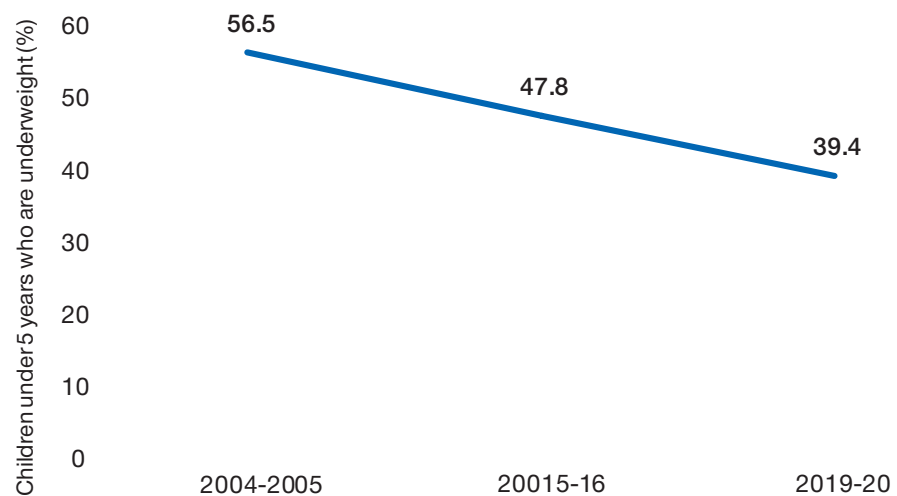
**Figure 17:** Current and Estimated Growth rate

The above figure shows the Current and Estimated growth rate for the indicators of Goal 2, End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture. The projections for each indicator in the state of Jharkhand are reviewed below:



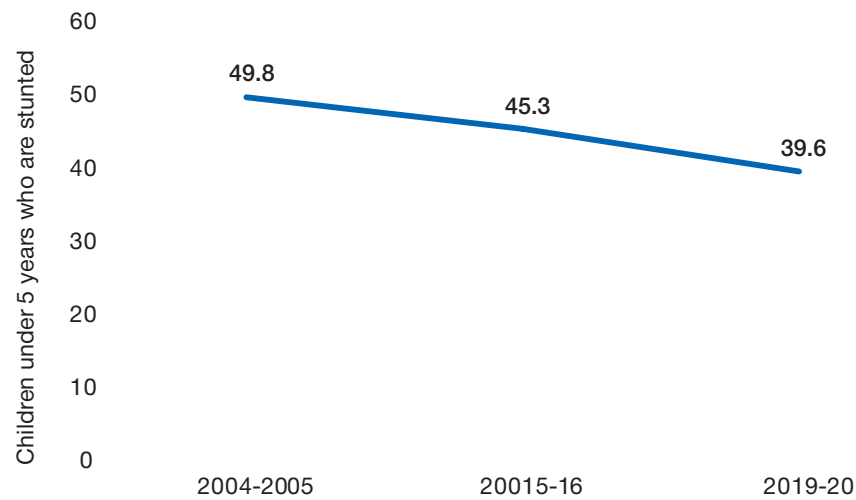
**Figure 18:** Percentage of Beneficiaries under NFSA

Nearly 75% of the rural population and 50% of the urban population from Antyodaya Anna Yojana (AAY) and priority households are covered under the National Food Security Act (2013). AAY households comprise the poorest of the poor, entitled to 35 kg of food grains. Figure 18 shows the percentage of beneficiaries under NFSA in Jharkhand over the last 5 years. While the percentage remained largely the same from 2018-2020, the coverage has increased to 20.67 in 2022, with a growth rate of 2.03 (Figure 18). Nonetheless, to reach the target of 2030, the estimated growth rate is calculated to be 21.78.



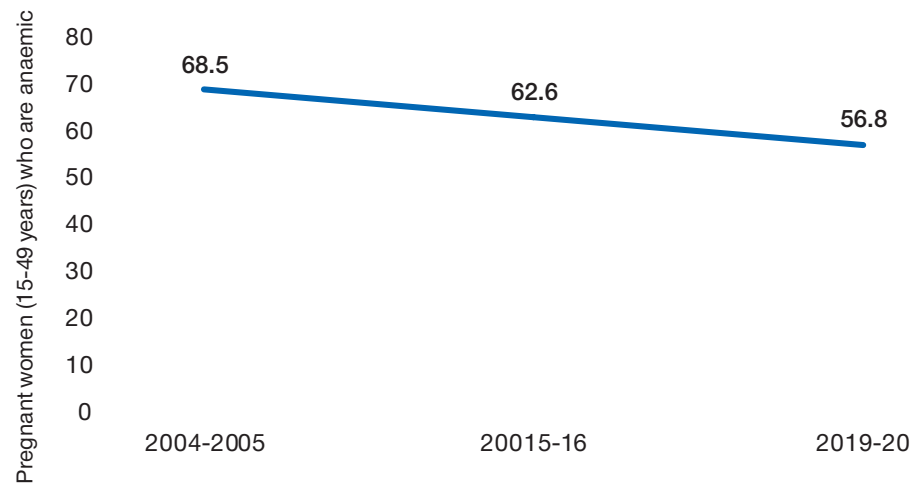
**Figure 19:** Percentage of children under 5 years who are underweight

This indicator calculates the number of children who are underweight, malnourished or severely malnourished under the age of 5 years. A set of indicators help to measure the nutritional imbalances that result in the undernutrition of the child. According to figure 19, the underweight children's percentage has significantly declined from 56.5 percent in 2004-2005 to 39.4 percent in 2019-2020 (NFHS), indicating an increased supply of nutritional food to children. Although there is much difference in the percentage, the growth rate is only -2.23 compared to the estimated growth rate of -26.15. It reflects that many children in Jharkhand under the age of 5 years are underweight and need to be provided with sufficient and quality foods to avoid malnutrition by 2030.



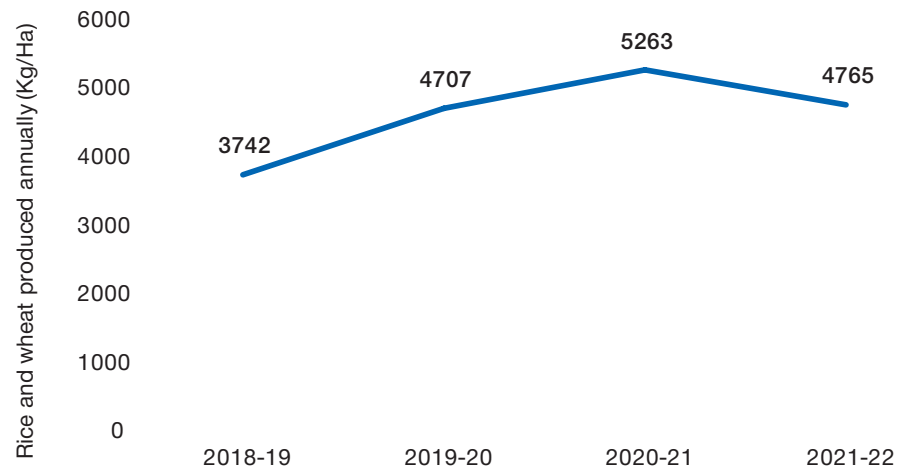
**Figure 20:** Percentage of children under 5 years who are stunted

Child growth is among the most crucial indicators for understanding the nutritional status of a community. Poor and inadequate diets induce growth retardation in students causing a more significant impact on health, leading to illnesses and death. Figure 20 shows the data for children who are stunted under the age of 5 years in Jharkhand. As per the data (NFHS), the percentage of children stunted under 5 years has reduced from 49.8 in 2004-2005 to 39.6 in 2019-20, showing a positive growth rate of (-)1.25 percent. This indicator, therefore, shows that children under the 5 years who are stunted have reduced from 2004-2005 to 2019-20. To reach the target of 0 per cent by 2030, the required growth rate is (-)17.20.



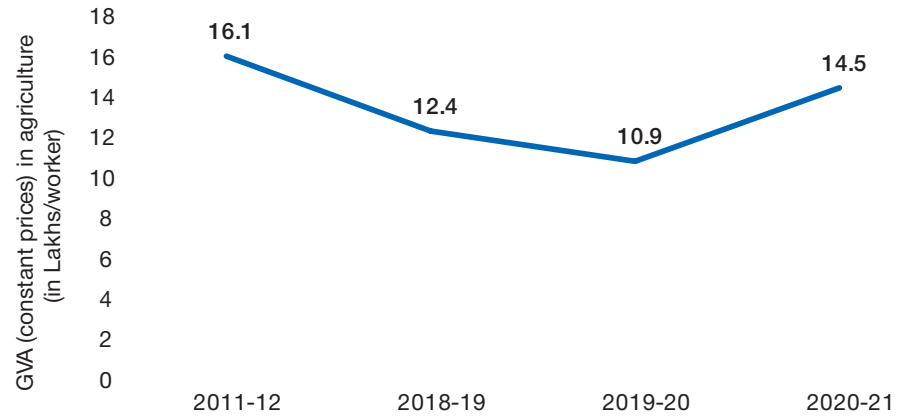
**Figure 21:** Percentage of pregnant women who are anaemic

Anaemia during pregnancy is a public health problem associated with adverse pregnancy outcomes. World Health Organization (WHO) defines anaemia in pregnancy as the haemoglobin (Hb) concentration of less than 11 g/dl. Anaemia in women during pregnancy varies due to geographical location, dietary practice and season, which cause deficiencies of iron, Vitamin A, B12, and folate. Figure 21 represents the percentage of pregnant women (15-49 years) anaemic in Jharkhand. Data shows a decline in the percentage of pregnant women (15-49 years) who are anaemic in Jharkhand from 68.5 per cent to 56.8 percent, showing a positive growth rate of (-)1.16. Nonetheless, to reach the 2030 target, the percentage of pregnant women with anaemia has to further reduce to 25.2, with an estimated growth rate of (-)7.81.



**Figure 22:** Rice and wheat produced annually (Kg/Ha)

SDG-2's target to eradicate hunger in the state aligns with having sufficient quantities of food available, whose continued production also depends on a healthy environment. Figure 22 shows the trend of rice and wheat produced annually (Kg/Ha) from 2018-19 to 2021-22. According to the figure, there is an upward trend in rice and wheat production from 3742 (Kg/Ha) in 2018-19 to 5263 (Kg/Ha) in 2020-21. However, the production declined from 2021-22 to 4765 (Kg/Ha). Therefore, this indicator shows an upward trend with a percentage of 6.23 from 2018-19 to 2021-22. To further increase production to the 2030 target of 7726.47, the estimated growth rate should be 1.39 per cent yearly.



**Figure 23:** GVA in agriculture at constant prices

Figure 23 represents the Gross value added in agriculture (in lakhs/worker) from 2011-12 to 2020-21. GVA in agriculture (in lakhs/worker) at constant prices is the value workers add to the goods and services bought in the market. The figure shows a decline in the percentage from 16.1 percent in 2011-12 to 14.5 percent in 2020-21, showing a positive trend in the indicator of (-)1.04. To reach the target of 1.22, the percentage has to decline further by -24.75 per cent; otherwise, it would take nearly 184 years for Jharkhand to reach the desired goal.



### State Best Practices

Since 2017, the Government of Jharkhand has been providing food grains at the doorstep to the primitive tribal population of the State under the PVTG Dakiya Scheme. Under this scheme, a PVTG family is provided 35 Kg of food grain free of cost. Currently, about 73,670 PVTG families in the State are covered under the scheme.

### Way Forward

In an effort to enhance the food security and nutrition indicators in Jharkhand, several strategies can be implemented. Firstly, to increase the coverage of beneficiaries under the National Food Security Act (NFSA), 2013, the state should focus on creating awareness about the program and improving the food grain distribution mechanism. This can be achieved through effective outreach and enrolment campaigns. Secondly, to address the issue of underweight and stunted children under the age of five, the state should prioritize maternal and child health and nutrition by providing balanced diets, promoting breastfeeding, and offering micronutrient supplementation.

For anaemia among pregnant women aged 15-49 years and adolescents aged 10-19 years, the state should focus on improving access to iron-rich foods, providing iron and folic acid supplementation, and promoting healthy lifestyles. Along with this, the state can focus on enhancing irrigation systems, promoting the use of high-yielding crop varieties, and offering extension services and training to farmers to boost agricultural productivity. Finally, to improve the economic performance of the agriculture sector, the state should focus on promoting value-added agriculture, encouraging agribusiness and rural entrepreneurship, and improving access to finance and markets for farmers.







## SDG 4 QUALITY EDUCATION

### ENSURE INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL

#### Overview

The 2030 agenda of Sustainable Development Goal 4 aims to provide children and young people with quality and easily accessible education, including other learning opportunities. Education is one of the core agendas of 2030 for Sustainable Development and essential for the success of SDGs. Education is highlighted as a standalone goal and includes targets on education on several other SDG goals, especially on health; employment; sustainable consumption and climate change.

As a global education agenda, SDG 4 differs from MDG 2 in scope, geographical coverage and policy focus. The geographical coverage of MDGs had a narrowed focus on low-income and conflict-affected countries in the Global South. On the other hand, SDGs, by definition, establish a universal focus applicable to all countries in the global North and global South.

While MDGs focus on children and access to primary education, SDGs go beyond to ensure equal opportunity in access to quality and learning outcomes at all levels of education and access to post-basic education and training for youth and adults. (SDG, 2016).

Despite the achievement of Universal Primary Education being the global target for the MDGs, disparities in access to education and learning outcomes persist across a range of education indicators such as dropout rates and pupil-teacher ratio, among others.

In addition to the factors above, the impact of the COVID-19 pandemic on schooling has been a “generational catastrophe.” The most vulnerable children and those unable to access remote learning are at increased risk of never returning to school and being forced into child marriage or child labour, creating a gap in educational outcomes or learning abilities for the children. It is estimated that 101 million additional children (from grades 1 to 8) fell below the minimum reading proficiency level in 2020 owing to the consequences of the pandemic, which wiped out the education gains achieved over the past 20 years (UNESCO, 2021).


#### **SDG 4 has ten targets. The seven ‘outcome-oriented targets’ are:**

**Target 4.1:** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

**Target 4.2:** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

**Target 4.3:** By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

**Target 4.4:** By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship



**Target 4.5:** By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

**Target 4.6:** By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy

**Target 4.7:** By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

**The three indicators are:**

**Target 4.a:** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

**Target 4.b:** By 2020, substantially expand the number of scholarships available to developing countries globally, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

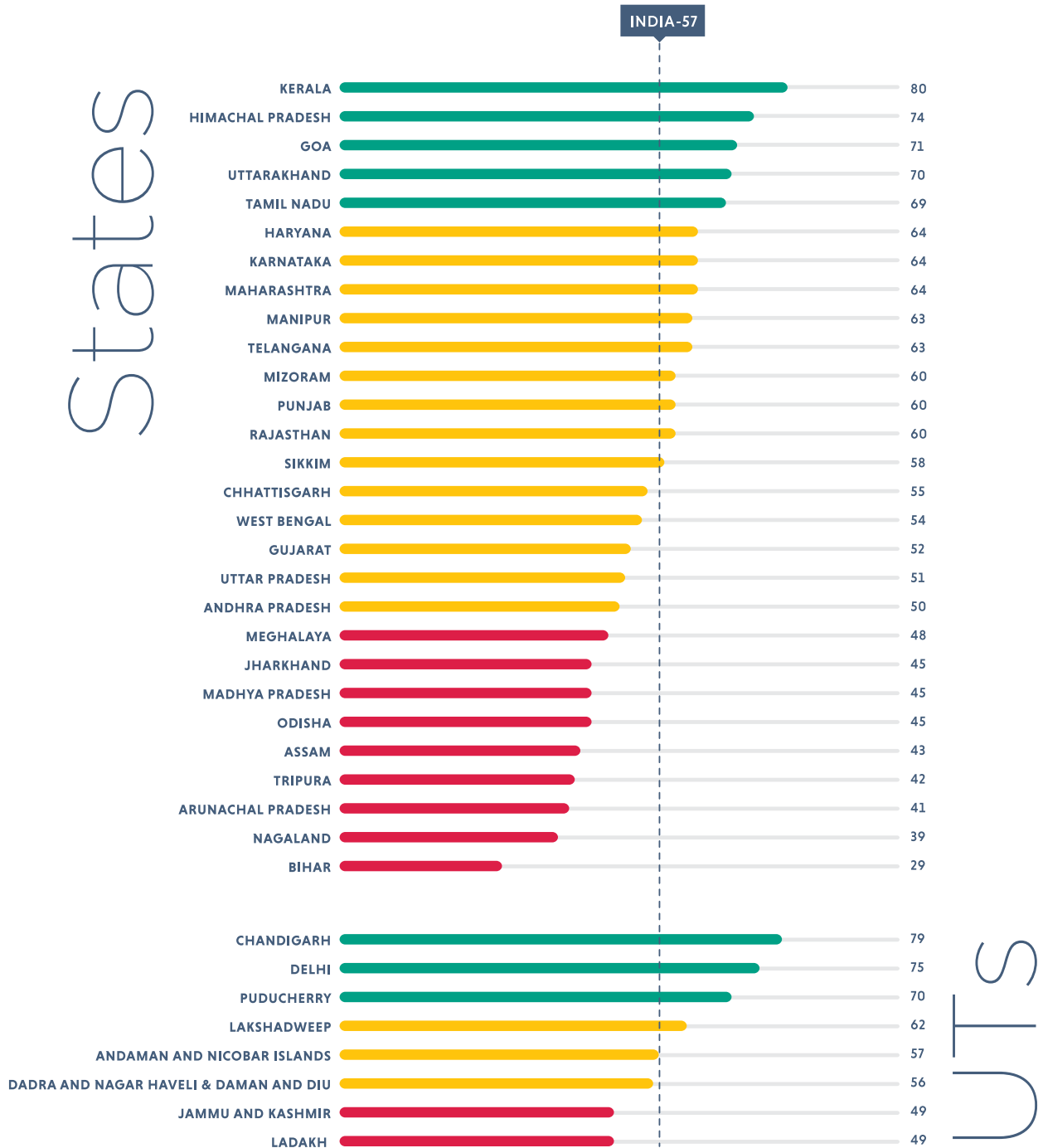
**Target 4.c:** By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States Status of Jharkhand and India

States

### Status and Performance of Jharkhand and India on SDG-4

According to NITI Aayog's SDG India Index 3.0 (NITI Aayog, 2021a), Jharkhand with a score of 45 (Aspirant Category) against India's average score of 57, ranks 21<sup>st</sup> among 28 states in the country for Goal 4 (Figure 24).

**Figure 24:** Index Score for Goal 4 of all States and UTs



Source: NITI Aayog, 2021a

UTS

The performance of the indicators used for assessing the SDG India Index 3.0 scores for Jharkhand and India for Goal 4 for the years 2020 is given in Table 34.

**Table 34:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Target
Adjusted Net Enrolment Ratio (ANER) in elementary education (class 1-8)	89.15	87.26	100
Average annual dropout rate at secondary level (class 9-10)	22.26	17.87	8.8
Gross Enrolment Ratio (GER) in higher secondary (class 11-12)	38.89	50.14	100
Percentage of students in grade VIII achieving at least a minimum proficiency level in terms of nationally defined learning outcomes to be attained by the pupils at the end of the grade	84.0	71.9	100
Gross Enrolment Ratio (GER) in higher education (18-23 years)	19.1	26.3	50
Percentage of persons with disability who have completed at least secondary education (15 years and above)	16.9	19.3	100
Gender Parity Index (GPI) for higher education (18-23 years)	0.96	1	1
Percentage of persons who are literate (15 years and above)	67.30	74.6	100
Percentage of schools with access to basic infrastructure (electricity, drinking water)	84.75	84.76	100
Percentage of trained teachers at secondary level (class 9-10)	80.12	82.62	100
Pupil Teacher Ratio (PTR) at secondary level (class 9-10)	51	21	30

Source: NITI Aayog, 2021a

Although Jharkhand's performance has improved from previous years, it still falls under the aspirant category. Eleven national-level indicators have been identified to measure the success of Goal 4. Table 34 suggests that seven out of eleven indicators are performing poorly than that of the national average, namely,

- Average annual dropout rate at the secondary level (class 9-10)
- Gross Enrolment Ratio (GER) in higher secondary (class 11-12)
- Gross Enrolment Ratio (GER) in higher education (18-23 years)
- Percentage of persons with disability who have completed at least secondary education (15 years and above)
- Percentage of literate persons (15 years and above)
- Pupil Teacher Ratio (PTR) at the secondary level (class 9-10).

However, the probability of most indicators acquiring the same achievement level as India is relatively high.

A review of the individual indicator score for Jharkhand and India also reveals that two indicators: Adjusted Net Enrolment Ratio (ANER) in elementary education (class 1-8) and Percentage of students in grade VIII achieving at least a minimum proficiency level in terms of nationally defined learning outcomes to be attained by the pupils at the end of the grade, is performing better than the national average. In addition to this, for two indicators, Jharkhand's performance stands almost at par with India, i.e., Percentage of schools with access to basic infrastructure (electricity, drinking water) and Percentage of trained teachers at the secondary level (class 9-10).

## Scheme mapping & Critical Outcomes

Based on the targets of Goal 4, Table 36 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 36 in the appendix).

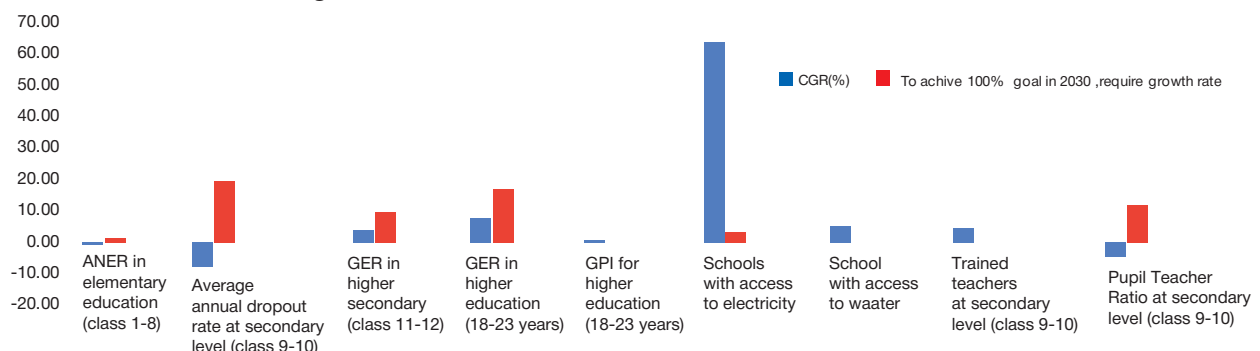
- Jharkhand has made significant progress since its formation in most educational indicators. According to Jharkhand's Economic Survey (2021-22), only half of the population of Jharkhand was literate at the time of its inception. In the last 20 years, the literacy rate has grown by 36 %. The state has made progress at all levels of education, along with improved enrolment and infrastructure, reduced dropout rates, and a reduced gap in male and female participation. The outcomes of all these schemes and projects in the Jharkhand State is reviewed below:
- The Child (7 years and above) literacy rate in Jharkhand has increased from 53% in 2001 (67% males and 39% females) to 73% in 2019-20 (81% males and 64% females). The Economic Survey (21-22) review reveals an increase in Gender Parity Index from 0.58 in 2001 to 0.79 in 2019-20. Although the literacy rate of males is higher than that of the females, it was observed that the rate of improvement among females is much higher than that of males. For males, the literacy rate has increased at an average annual rate of 1.3% between 2001-2011, by 1.2% from 2011 to 2014, 0.5% from 2014 to 2017-18 and 0.4 % from 2017-18 to 2018-19. Concurrently, the average annual rate for females has improved from 3.6% between 2001-2011, to an impressive increase of 5.8% between 2017-18 and 2018-19. (Jharkhand Economic Survey, 201-22)
- The rise in the literacy rate in Jharkhand results from an unprecedented increase in the number of students enrolled at all levels of school education. Currently, nearly 75 lakh students are enrolled at different stages of school education. Among them, 38 lakh students are enrolled in the primary level of education, nearly 20 lakhs at the upper primary level, another 10 lakh students at the secondary level and the rest 6 lakhs at the higher secondary level of schooling in Jharkhand state.
- Furthermore, the Gross Enrolment Ratio and Net Enrolment Ratio of Jharkhand exhibit the population's participation level at a given level of education. The data for the year 2019-20 shows the GER fell below 100% for upper primary and elementary levels of education. At the secondary and higher secondary level, the GER is low and decreased between 2018-19 and 2019-20. However, the GER for the primary level of education was above 100% for the corresponding year. Like GER, the NER is high at the primary level i.e., above 90% and approximately 90% for upper primary and elementary levels of education. On the contrary, the NER is remarkably low for secondary and higher secondary levels of education, with a percentage of 40 in 2019-20.
- Significant improvement in GER is seen in marginalised groups (SCs and STs) of the Jharkhand state. Even with shallow educational opportunities, SCs and STs have rapidly grown with the rest of the communities. The survey reveals that the GER of the SCs and the STs at all levels of education is higher than the average GER of the state. Nonetheless, the GER for SCs and STs could be much higher for secondary and higher secondary levels of education. No systematic difference is visible between the enrolments of boys and girls in these two communities at all levels of education.
- The GER for higher education has improved from 7.5% in 2010-11, to 21.9% in 2019-20. While there has been a steady rise in the Gross Enrolment ratio at the higher education level, it continues to be below the national GER of 27.1%. Although the enrolment has improved for both male and female, the GER for males is less than 28 % of the national average. Similarly for females, it is about 31% less than the national average. Likewise, the GER for Higher education for SC and ST populations also stands below the national average and below the state average.
- The UDISE data discloses that the dropout rates have reduced drastically for all levels of school education from 2016-17 to 2020-21. Dropout rates for elementary-level of education saw a sharp decline from 15.95% in 2016-2017 to 4.12% in 2020-21. Similarly, secondary and higher secondary dropout rates also reduced from 22.39% to 6.51% and 34.93% and 10.10%, respectively.

- Under the Right to Education act, the Pupil-Teacher Ratios (PTR) for the primary and upper primary classes are proposed as 30:1 and 35:1, respectively. In Jharkhand, the pupil-teacher ratio has improved over the years. The overall PTR was 46:1 in 2014-15, decreased to 41:1 in 2016-17, and decreased to 38:1 in 2020-21. The PTR in the primary classes was 34:1 in 2013-14 and decreased to 29:1 in 2020-21. This ratio decreased in the upper primary classes from 48:1 to 41:1 and in elementary classes from 42:1 to 36:1 in this period. The pupil-teacher ratio has also improved in secondary classes. It was 74:1 in 2013-14, which improved to 45:1 and in 2020-21. However, for higher secondary classes, PTR has increased from 51:1 in 2013-14 to 61:1 in 2020-21.
- The total number of schools has reduced from 41,000 to 35,000 between 2015-16 and 2018-19. The reason behind the reduction is the merger of many schools. While more than 90% of the schools have classes up to the elementary level, only 5% of schools in Jharkhand provide secondary level education, whereas schools ensuring higher secondary level education is as low as 5%.
- The Department of Education (DoE) affirms that most schools in Jharkhand are in good condition. Among the total schools in Jharkhand, only 10% of classrooms require significant repairs. Regarding basic facilities for the schools in Jharkhand, most of the schools under the DoE are well equipped with resources like drinking water, toilets and libraries. The data demonstrate that nearly 98% of the schools have drinking water facilities, 97% have separate toilets for girls, and 96% have separate toilets for boys. About 95 per cent of the DoE-managed schools have libraries. In terms of access to electricity in schools, there is a rise from 42% of schools in 2017-18 to 96% of schools in 2020-21.
- According to AISHE 2018-19, Jharkhand comprises 323 colleges, constituting 1% of the total number of colleges in the country. In contrast to the national average of 30 colleges per lakh population, Jharkhand, due to its low college density, has only 8 colleges per one lakh students in the age group of 18-23 years.

### Projections

Jharkhand has made significant progress in most indicators of educational development since 2000 when it was re-organised as a separate state out of erstwhile Bihar. At all levels of education, the enrolment rate has increased, the dropout and repletion rates have decreased, and the educational institutions' infrastructure has improved. This section mainly demonstrates the trends of each indicator for SDG 4, with projections keeping in mind the 2030 agenda. It is to be noted that trends and projections have been shown only for those indicators for which real-time data is available.

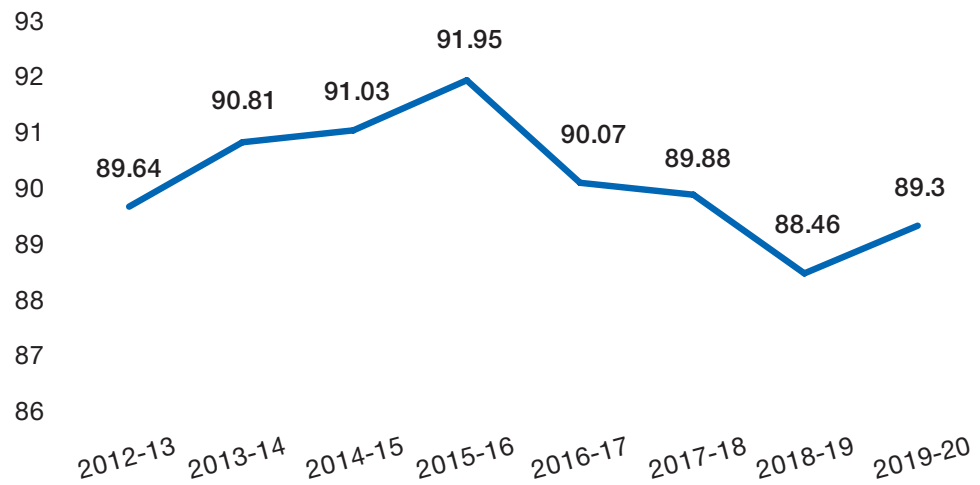
**Figure 25:** Current and Estimated Growth Rate



The above figure shows the Current and Estimated growth rate for the indicators of Goal 4, Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All. The projections for each indicator in the state of Jharkhand are reviewed below:



**Figure 26:** ANER in Elementary Education (class 1-8)



Some children might enter primary school early and move to secondary school before reaching the official age limit of primary education. The NER needs to include those students, underestimating the total number of children who receive a complete primary education course. Therefore, to adjust the problem, Adjusted Net Enrolment Ratio (ANER) is calculated as the number of official primary school-age children who are enrolled either in primary or secondary education expressed as a percentage of the total population of children of official primary school age. Figure 26 shows the Adjusted Net Enrolment Ratio (ANER) over 7 years from 2013-14 to 2019-20 in the state of Jharkhand. An evident upward trend in the ANER in elementary schools (class 1-8) from 89.64 in 2013-14 to 91.95 in 2016-17. However, from then, there has been a sharp decline in ANER in elementary schools to 88.46 in 2019-20. For this, the annual growth rate was -0.26 in 2013-20. As per the estimates, to reach 100 percent by 2030 in Jharkhand, the estimated growth rate by the year 2030 should be 1.14. With the current growth rate, the state would take nearly 54 years to reach 100 percent unless accomplished.

**Figure 27:** Average Annual Dropout Rate at Secondary Level (class 9-10)

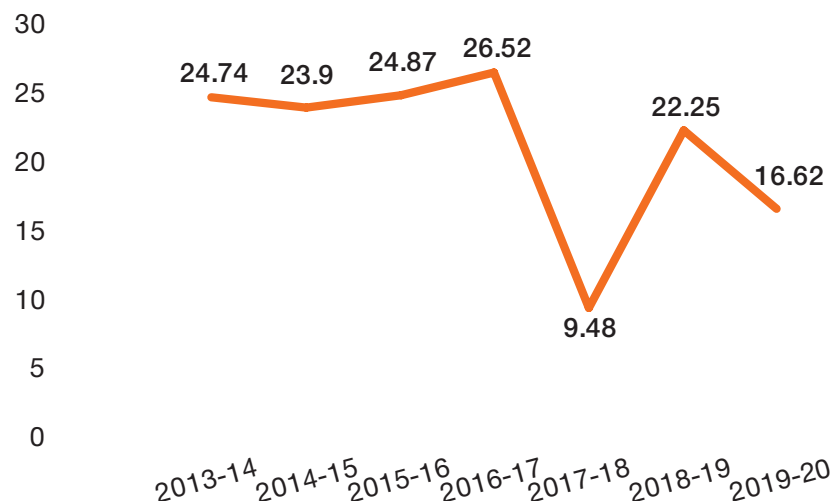
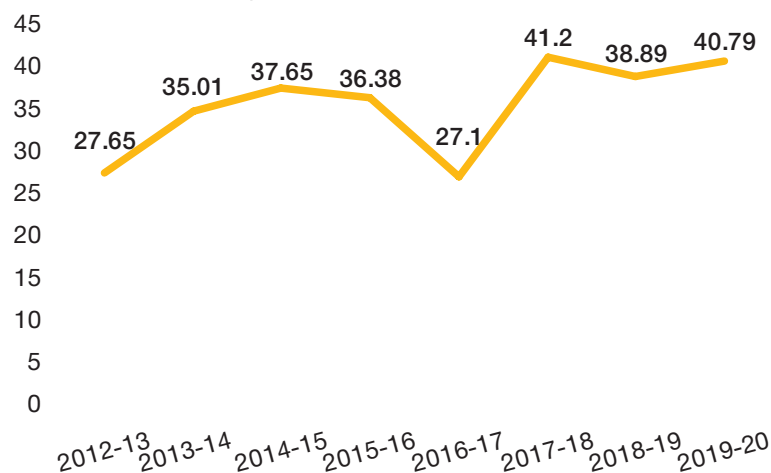


Figure 27 shows the average annual dropout rate at the secondary level (class 9-10), which measures the proportion of students who drop out in a single year without completing a secondary level of education (UDISE). As the average annual dropout rate is a negative indicator, an upward-sloping graph depicts a negative trend, while a downward slope depicts a positive trend. In the figure, from 2013-14 to 2016-17, the average annual dropout rate rose from 24.74 % to 26.52 %, depicting a higher proportion of children

dropping out. In 2017-18, the dropout rate sharply declined to 9.48% and increased to 22.25% in 2018-19. As per currently available data (2019-20), there is a decline in the proportion of children dropping out of secondary education in Jharkhand, with 16.62 %. According to statistics, the current growth rate is (-) 7.89 in Jharkhand from 2013 to 2020. In the same period, the estimated growth rate is calculated to achieve 8.8 per cent of dropouts in secondary education by 2030.

**Figure 28:** GER in Higher Secondary (Class 11-12)



The above figure 28 shows the Gross Enrolment Ratio in Higher education, which determines the proportion of students enrolled in higher secondary education in one year in the state of Jharkhand. While the graph depicts an overall upward slope in GER during 2013-2020, Jharkhand saw a decline in GER in only two financial years, i.e., a decline of 9.28% in 2016-17 and a slight decline of 2.31% in the year 2018-19. For this indicator, the current growth rate depicts a positive growth of 3.91 % from 2013-2020. To reach the target of 100% enrolment by 2030, Jharkhand will have to grow at an estimated rate of 9.38% (Figure 28). However, if this growth rate is not achieved, Jharkhand will take approximately 13 years to reach the target.

**Figure 29:** GER in Higher Education (18-23 years)

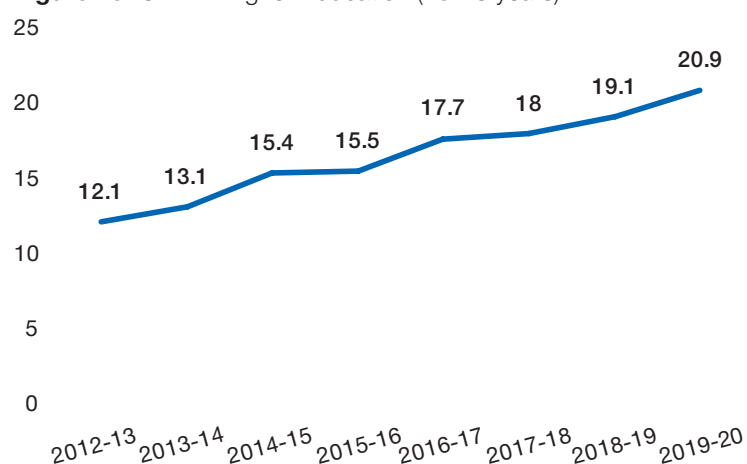
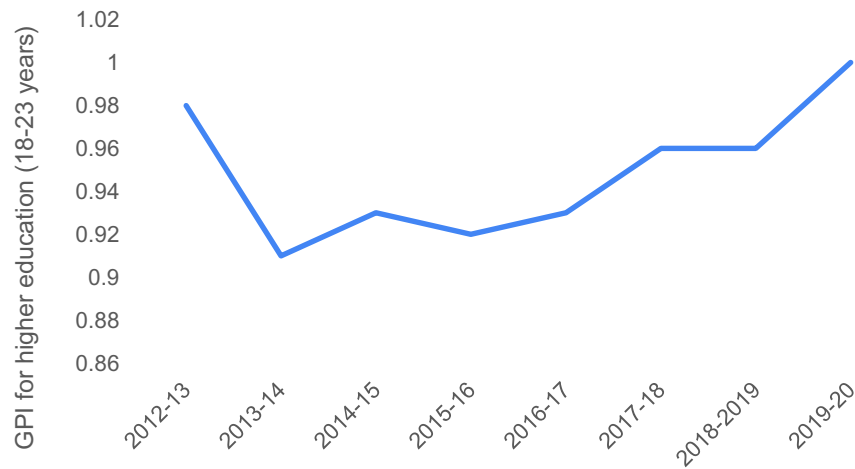


Figure 29 demonstrates the number of children enrolled in Higher Education in one year, calculated as the Gross Enrolment Ratio in Higher Education. As illustrated in the figure, the state of Jharkhand shows an upward-moving slope from 12.1% in 2013-14 to 20.9% in 2019-2020. The GER only seems to decline in 2015-16 by a meagre 0.1%. According to estimates, the current growth rate for this indicator is calculated with a positive rate of 7.80% from 2013-14 to 2019-20. The estimated growth to reach the target of 50 percent (NITI Aayog, 2021) by 2030 is calculated as 9.11% for the indicator.

**Figure 30:** GPI for Higher Education (18-23 years)



According to UNESCO, Gender Parity Index is a socioeconomic indicator that measures the access to education for males and females. A GPI lower than one represents males having greater access to education than women, while a higher GPI indicates a higher proportion of females having access to education. A GPI that is one or close to one means both men and women have equal access to education. Figure 30 shows Jharkhand's GPI in higher education (18-23 years). The present data (2019-20) shows that Jharkhand has reached a GPI of one where both males and females access an equal level of education. However, it is interesting to note that, in 2012-13, Jharkhand's GPI was close to one but declined to 0.91 in 2013-14, after which it increased and demonstrated a growth rate of 0.61% (Figure 30) in the period 2012-13 to 2019-20. It shows that Jharkhand has already met the set target of 2030.

**Figure 31:** Percentage of Schools with Access to Electricity

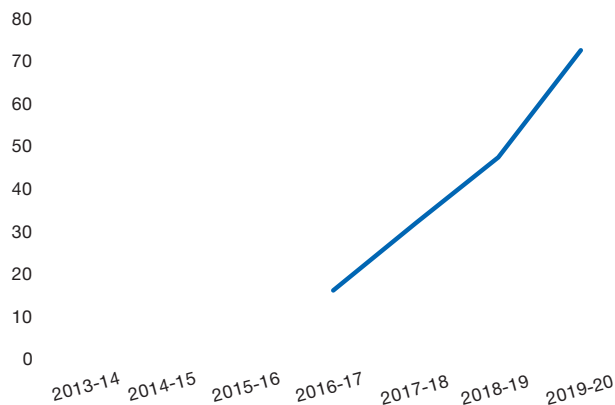
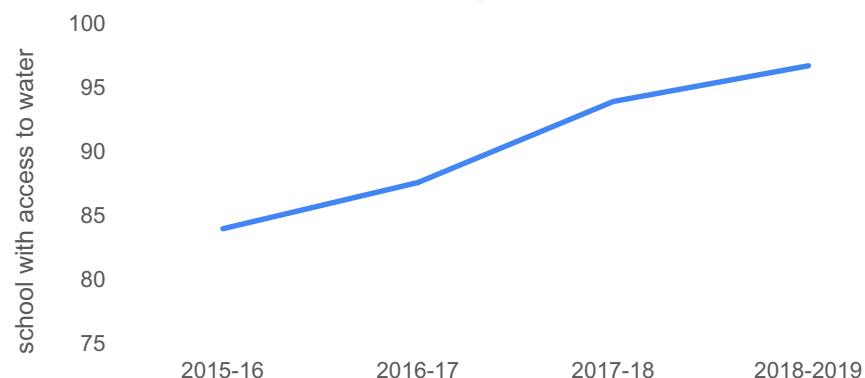


Figure 31 calculates the percentage of schools with access to Electricity in the state of Jharkhand. The data is only available for 4 years, from 2015-16 to 2018-19. As shown in the figure, the indicator shows a sharp rise in the access to Electricity in schools of Jharkhand with a current growth rate of 63.31%. Thus, Jharkhand will achieve the 100% target with an estimated growth rate of 3.23% by 2030.

**Figure 32:** Schools with Access to Drinking Water



The indicator mentioned above illustrates the percentage of access to drinking water in schools in Jharkhand. Providing access to clean and safe drinking water is among the most basic facilities every school should provide students for their health and well-being. Thus, Jharkhand has shown a remarkable rise from 83.98% in 2015-16 to 96.71% in 2018-19. As per the data, the current growth rate is calculated as 5.05% for 2015-16 to 2018-19. However, to reach the target of 2030, the required growth rate for the state should be 0.34%.

**Figure 33:** Trained Teachers at Secondary Level (class 9-10)

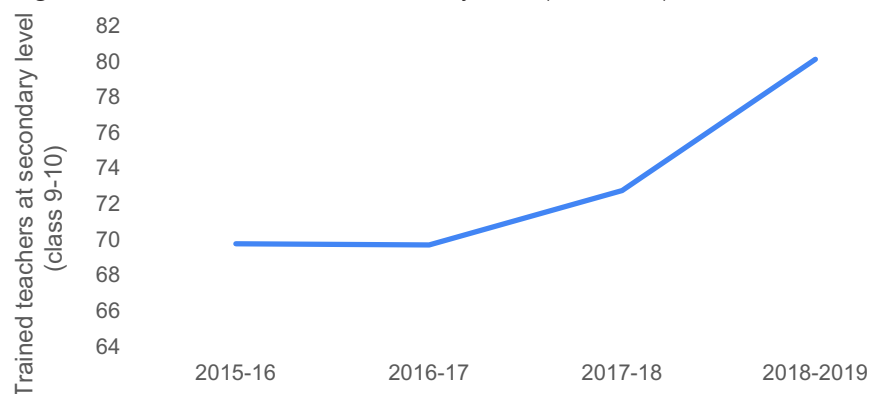
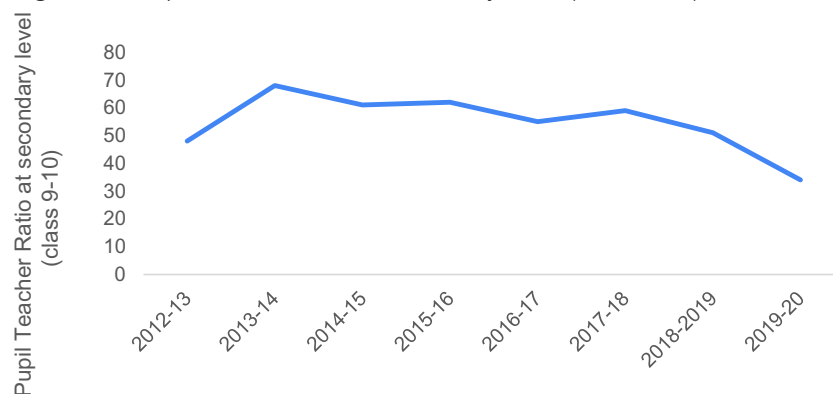


Figure 33 demonstrates the percentage of teachers trained to teach students at a secondary level of education. According to the figure, the indicator shows almost the same from 2015-16 to 2016-17. Nonetheless, one can observe an increase in the percentage of trained teachers from 2017-18, with 72.74%, to 2018-2019, with 80.12%. As per the calculated current growth rate, there is a positive change of 4.69%. With an estimated growth rate of 2.24% the state of Jharkhand can achieve a 100% target by 2030.

**Figure 34:** Pupil Teacher Ratio at Secondary Level (Class 9-10)



The pupil Teacher Ratio (PTR) at the secondary level is the average number of students per teacher at a secondary level of education in a given school year. A lower PTR shows a better performance, while a higher PTR shows poor performance. The figure shows a continuous downward slope that indicates a decreasing number of students per teacher in Jharkhand, except for the year 2013-14, which shows a sharp increase to 68 students from 48 students in 2012-13. The data depicts that the current growth rate is calculated as (-) 4.73, but the required growth rate should be only -1.24 to reach the 2030 target of 30 students per teacher.

### Way Forward

The COVID-19 pandemic, however, has had a catastrophic effect on education, especially school education in the State. At the onset of COVID-19 in March 2020, all the schools and other educational institutions in the State were closed down due to the national lockdown. They have remained closed till the middle of February 2022 and are only now in the process of reopening. During this period, arrangements for online classes were initiated. However, only a few students could take advantage of it. Especially left out were the children of the underprivileged groups because of limited access to smartphones and the internet or having someone at their homes to support them in their studies. The number of children not enrolled in schools has also increased in the last two years. The observed adverse impact of the Covid-19 pandemic on the targets of Goal 4 is a matter of immense concern, and unattended, they may lead to a loss of a cohort of pandemic students.

To improve the education indicators in Jharkhand, a comprehensive approach that addresses various factors such as financial assistance, community involvement, and teacher training is necessary. The government can introduce financial assistance and scholarship programs for students from disadvantaged backgrounds to address the issue of high dropout rates at the secondary level. To increase Gross Enrolment Ratio (GER) in higher secondary and higher education, the government can set up more schools in rural areas, offer incentives to teachers, and promote research and innovation in higher education. For persons with disabilities, the government can introduce laws and policies to make all schools inclusive and accessible, provide financial assistance and scholarships, and provide training for teachers to work with students with disabilities. To increase the literacy rate, the government can launch adult literacy programs, encourage community involvement, and provide incentives for people to continue their education. To improve Pupil Teacher Ratio (PTR) at the secondary level, the government can provide incentives for teachers to work in remote or underprivileged areas, invest in teacher training and professional development, and encourage public-private partnerships and collaboration between schools.







## SDG 9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE

### BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALISATION AND FOSTER INNOVATION

#### Overview

Infrastructure and Innovations can stimulate growth and thus facilitate new jobs and income for the people. Unfortunately, developing nations lag because of lower educational levels and resources. Lack of infrastructure reduces access to markets, information and training, causing a significant barrier when it comes to business. Thus, to close the gaps in infrastructure, innovation and industrialization, the United Nations has developed Sustainable development goal 9. SDG 9 aims to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. The goals stress the importance of domestic technology development, research, innovation and access to the internet across the globe. The UN targets all countries to upgrade infrastructure and retrofit industries, adding new technology to pre-existing technology to be sustainable by 2030.

The underlying need for this goal necessitates a gradual shift of industrial growth towards a more equitable integration of innovations that provide a sustainable and increased efficiency in resource extraction and mitigation of harmful ecological impacts. It promotes income, productivity, health and more significant educational effects and facilitates long-term growth. Therefore, focusing on developing and promoting inclusive, sustainable infrastructure and industrialization are based on the following targets set by the UN.


**Target 9.1-** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

**Target 9.2-** Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product in line with national circumstances and double its share in the least developed countries

**Target 9.3-** Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets

**Target 9.4-** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action following their respective capabilities

**Target 9.5-** Enhance scientific research, and upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending



**Target 9.6-** Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States 18

**Target 9.7-** Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, among other things, industrial diversification and value addition to commodities

**Target 9.8-** Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least-developed countries by 2030

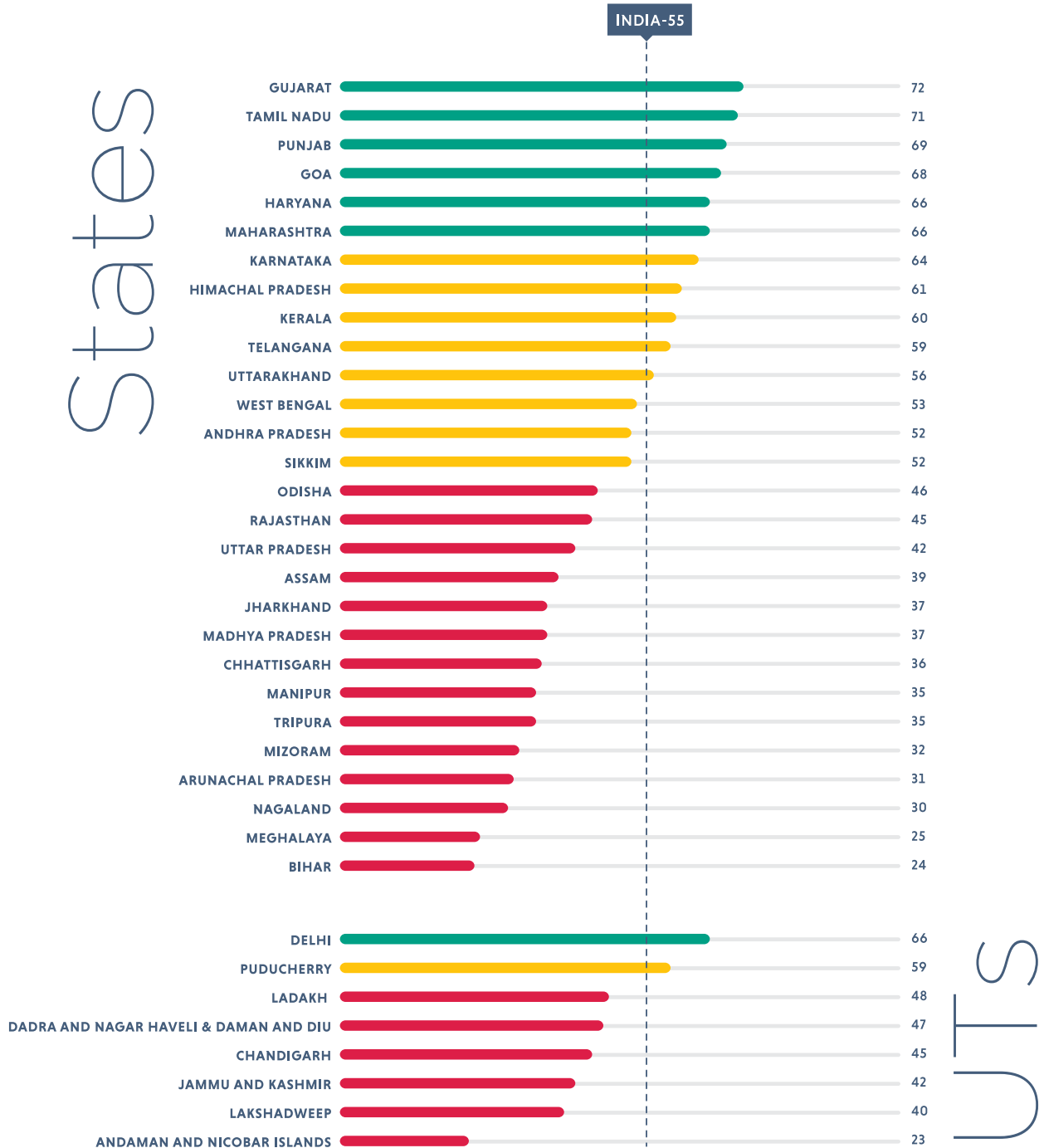


States

### Status and Performance of Jharkhand and India on SDG-9

Although the Jharkhand government is keenly moving towards skill development, improving mineral products, and agriculture for increased industrial development, the state seems to be declining in the SDG index as per the data represented in the Figure 34 below as per the SDG India Index 3.0, 2021. Jharkhand is among the bottom 10 performing states with average composite score of 37.

**Figure 35:** Index Score for Goal 9 of all States and UTs



Source: NITI Aayog, 2021a

SDG

**Table 36:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	National Target
Percentage of Targeted Habitations connected by all-weather roads under the Pradhan Mantri Gram Sadak Yojana (PMGSY)	99.86	97.65	100
Percentage share of GVA in manufacturing to total GVA (current prices)	20.02	16.1	25
Manufacturing employment as a percentage of total employment	7.68	12.07	20
Innovation score as per the India Innovation Index	17.12	35.59	100
Score as per LEADS report (Logistic Ease Across Different States)	2.88	3.28	5
Mobile connections per 100 persons	57.55	84.38	100
Internet subscribers per 100 population	30.99	55.41	100

Source: NITI Aayog, 2021

According to NITI Aayog's SDG Index 3.0, Jharkhand, with a score of 37 falls under the aspirant category compared to India's score of 55, falling in the performer category. The data reveals that there has been a sharp decline in the score from 70 in 2019 to a mere 37 in 2020.

Seven key indicators have been identified as per NITI Aayog to represent the status of Industry, Innovation and Infrastructure in the state of Jharkhand. Out of these, five indicators are performing poorer than the national average:

Manufacturing employment as a percentage of total employment

Innovation score as per the India Innovation Index;

Score as per LEADS report;

Mobile connections per 100 persons;

Internet subscribers per 100 population.

On the contrary, two indicators are performing much higher than the national average:

Percentage of Targeted Habitations connected by all-weather roads under PMGSY

GVA in manufacturing to total GVA (current prices)

### Scheme mapping & Critical Outcomes

- Based on the targets of Goal 9, Table 37 maps all essential State and Central Government schemes and projects by concerned line departments that contribute towards achieving the targets and their identified indicators (See Table 37 in the appendix).
- Jharkhand is becoming the vanguard of industrialisation among all Indian States. Although the state has handled the COVID-19 pandemic with utmost sincerity and coordinated efforts, the economic and developmental progress has been significantly affected due to disrupted supply chains and demand. Some of the major industries in the state have been severely affected, including construction, mining, tourism, and automobile engineering, leading to a diminishing export from the state. The outcomes of the schemes and interventions under these industries have been mentioned below:
- To establish linkages between large industries, the MSMEs and ancillary industries, Jharkhand Industrial and Investment Promotion Policy 2016 has increased the disbursed amount of money from Rs. 1522 crores in 2019-20 to Rs. 4475 crores in the year 2020-21.
- Under the Export Policy (2015), 98.16 lakhs have been spent on transport subsidies in Jharkhand. The data from the Department of Industry, GoJ, reveals that out of the 11 approved proposals for the iron and steel industry, 8 are commissioned projects with a total investment of 88.05 crores. All 190 projects in the fly ash industry have been commissioned (76.79 crores). Out of the 43 approved proposals in the textile industry, only 12 have been commissioned, with an overall investment of 44.75 crores. In the

feed industry, all the 11 projects that were approved have been commissioned by disbursing Rs. 5441.07 lakhs with nearly Rs. 640 lakh subsidy as well as employment opportunities to 375 lakh people in the financial year 2020. In addition, the 68 approved projects under the food industry have been commissioned with an investment of 49707.61 lakhs and by providing employment opportunities to nearly 3153 lakh people of Jharkhand.

### **Sericulture, Handloom and Handicraft Sector**

- Sericulture is among the critical employment-generating sectors with a massive growth potential for employment generation, especially in rural areas. Being the largest producer of Tussar silk in India, it produces approximately 76.4% share of the total output. It is to be noted that the sector accurately aligns with the 'Make in India', and 'Skill India' programmes of the Central Government. In the year 2021, the state of Jharkhand has observed the following achievements in the sericulture sector, production of 2184.45 mts of Tussar Raw Silk; Training of Improved Techniques to 6250 Sericulture Farmers; 60 farmers receiving one-year certification training; preservation of 81.13 lakhs of Tasar seed cotton; development of 16.5 acres of mulberry sericulture, plantation and equipment support; finally, support to 11000 farmers under Krishak Sambad Suvidha Scheme. (Directorate of Handloom, Sericulture and Handicraft Department, 2021)
- Additionally, the handicrafts sector in the state of Jharkhand consists of more than 40 types of handicrafts in different parts of the state. The Directorate of Handloom, Sericulture and Handicraft provides eight handicraft resources and the Development Centres in Deoghar, Dumka, Dhanbad, Hazaribagh, Khunti and Palamu districts of Jharkhand. As per the Economic Survey (2021-22), for 2018-19, 2545 artisans were provided with upgraded training in different types of handicraft trades. Nonetheless, the number of craft persons reduced to 1135 in 2020-21. Among the total number of artisans, 30% of them include women artisans. Lastly, progress under the Strengthening of Primary weavers Co-operative Societies Scheme for the handicraft sector indicates that 67 weavers have been provided with one-year training in weaving. In contrast, 20 beneficiaries have been provided with two months of training in weaving and dyeing.

### **Mining**

- With significant deposits of minerals amounting to 40% of the total mineral wealth in the country, the state of Jharkhand has immense potential for industrialization. The state is the sole producer of cooking coal, uranium and pyrite, leading the country in producing coal, mica, Kyanite and copper in India. Moreover, Iron ore is the only mineral which exists in abundance. It has the maximum production in Jharkhand of nearly 1,70,32,731 lakh tonnes, followed by coal and bauxite with a production of 1,48,13,880 lakh tonnes 11,17,174 lakh tonnes (Dept. of Mines and Geology, 2021-22). It is observed that there was a fall of 1.7 percent of the total mineral production from major mines registered in Jharkhand from the year 2020 to 2021. This fall in production and revenue incurred in the year 2021 is because of the economy slowing down due to the COVID-19 pandemic.
- Furthermore, in 2021, about 46 thousand metric tonnes of minerals from the major mines and about 857 thousand cubic feet of that from the minor mines were produced. The revenue collection was about 476 crores and 363 crores from the significant and minor mines in 2021.

### **IT-based Infrastructure**

- IT-based infrastructure is essential in ensuring global connectivity through a virtual mode. The impact of Covid-19 has highlighted how critical infrastructure is across every sector of the economy. The Jharkhand State Information and Communication Network, also known as the JharNet communication network, has been established to cater to the Government's need for infrastructure within various departments. According to the IT-based infrastructure in Jharkhand, a total of 25689 Common Service Centres' have been registered, under which 18676 are active, and 14068 CSCs have also been through the physical verification through the Mobile app.

- PMGSY was implemented to bridge the gap between rural and socio-economic aspects of employment, education and healthcare. Hence, the scheme's primary objective is to connect unconnected habitations by establishing good all-weather roads. According to the Jharkhand Economic Survey 2020-21, a total of 2,008.35 kilometres of all-weather roads have been constructed under the PMGSY-I (683.16 kilometres), PMGSY- II (1,045.93 kilometres) and RCPLWEA (279.26 kilometres) schemes in Jharkhand with a total expenditure of Rs. 1,084.01 crores. In the financial year 2021-22 (till Jan), a total of 451.23 kilometres of road have been constructed with an expenditure of Rs. 443.1 crores. Data reveals that 47 habitations have been connected in 2020-21 and 9 habitations in 2021-22. About Long-Span Bridges (LSB), 74 and 50 bridges were built in these two financial years.
- Since its implementation in 2000, PMGSY has successfully connected 10,958 (99.98 percent) habitations out of 10,960 sanctioned habitations till the financial year 2021-2022. Similarly, the scheme has also been able to construct nearly 92% of 28.5 thousand kilometres of authorised good weather roads by investing more than ten thousand crore rupees. Among all the districts in the state of Jharkhand, West Singhbhum, Gumla, and East Singhbhum have the highest road construction.

### **Railways**

- The Ranchi Railway Division was established in 2003 to renovate the railway infrastructure across Jharkhand. The Indian Railways has played a significant role in fighting the Pandemic by providing PPE Kits, reusable face masks, and hand sanitiser to its passengers. Coaches were transformed into COVID care centres to provide health care services to the maximum. The budget grant for railways saw a rise from Rs. Rs 457 Cr in 2009-2014 to Rs 2,532 Cr in 2014-21. 452 new lines have been sanctioned, and 374 km doubling/tripling lines have been commissioned. On average, a 92 percent increase was seen in the annual completion of doubling/tripling.
- Moreover, under the UDAAN scheme, the aviation sector has taken steps to connect the secluded cities of Jharkhand, like Jamshedpur, Dumka, Dhanbad and Hazaribagh, to promote infrastructure development.

### **GVA- 20**

- With an average annual growth rate of 7.8 percent between 2011-12 and 2018-19, Manufacturing is the fastest-growing sub-sector of this industrial sector. The GVA for 2019-20 saw a contraction of 1 percent, whereas the sub-sector declined by 7.2 percent for 2020-21. The growth rate of the Manufacturing sector has fluctuated between – 25.8 percent (in 2015-16) and +34.1 per cent (in 2016-17), and +22.4 per cent (in 2018-19) in the last ten years, highlighting the highly fluctuating tendency of the sub-sector. As a result, the coefficient of variation of the value of its output has been 21.1 per cent during this period.
- Being highly rich in mineral zones, the state of Jharkhand constitutes 40 percent of the total mineral reserves and 29 per cent of the country's total coal reserves. Being the state with a significant number of industries and natural resources, the mining and quarrying sector accounted for 8.9 percent of the State's Gross State Value Added (GSVA) for the financial year, 2019-20.

### **Way forward**

Jharkhand, with a score of 37 has an Aspirant status for Goal 8 (SDG India Index,2021). However, against India's average score of 61, Jharkhand ranks amongst the bottom-performing States in the country. Despite the state ramping up in this sector, the 'Aspirant' status in this goal is of significant concern and needs more attention.

The indicators on which Jharkhand is performing low and still have a distance to travel before reaching the national targets are listed below. These indicators relate to two factors, innovations and developing industries.

**Table 38:** Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	National Target
Percentage share of GVA in manufacturing to total GVA (current prices)	20.02	16.1	25
Manufacturing employment as a percentage of total employment	7.68	12.07	20
Innovation score as per the India Innovation Index	17.12	35.59	100
Score as per LEADS report (Logistic Ease Across Different States)	2.88	3.28	5
Mobile connections per 100 persons	57.55	84.38	100
Internet subscribers per 100 population	30.99	55.41	100

Source: NITI Aayog, 2021

In Jharkhand, achieving Sustainable Development Goal 9 (SDG 9) requires a focus on the development of the manufacturing sector. To achieve this, the percentage share of GVA in manufacturing to total GVA (current prices) needs to be increased through favourable policies and tax incentives to encourage investment, as well as support for small and medium-sized enterprises (SMEs) to improve their competitiveness. Additionally, improving infrastructure, including access to electricity and transportation, is crucial for the growth of the manufacturing sector in Jharkhand.

To increase employment in the manufacturing sector, promoting its growth through investment and business development support, improving the skills of the workforce through vocational training and education programs, and encouraging innovation and the adoption of new technologies is crucial. Improving the innovation score as per the India Innovation Index can be achieved by encouraging research and development through government support and investment in universities and R&D centers, promoting entrepreneurship, and improving access to finance for start-ups and SMEs.

Improving the score as per the LEADS report (Logistic Ease Across Different States) is also important for the development of the manufacturing sector in Jharkhand. This can be done by improving transportation and logistics infrastructure, including roads, ports, and airports, streamlining regulations and procedures related to the movement of goods, and encouraging the use of technology to improve efficiency. To increase digital connectivity in Jharkhand, improving access to affordable telecommunications services, including broadband, and encouraging the adoption of digital technologies, including e-commerce and digital financial services, is crucial. Providing training and support for individuals and businesses to increase their digital literacy is also important. This includes improving the number of mobile connections per 100 persons and Internet subscribers per 100 population.

Overall, these initiatives will help improve Jharkhand's competitiveness and attract investment, ultimately leading to greater economic growth and job creation.





## SDG 13 CLIMATE ACTION

### TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

#### Overview

Climate change has severe consequences on the ecosystem's social, economic, and physical well-being. Sustainable Development Goal 13 aims to "Take urgent action to combat climate change and its impact", through required awareness, education, innovation and development. An adverse climate change can severely impact the quality and availability of necessities like fresh water, food security, and energy, suggesting the dire need to ensure strong links between sustainable solutions and climate. Climate change is a serious concern across the globe. However, it is one of the lowest-ranked development priorities in all countries, resulting in an increased burden on the social, economic and natural systems in the upcoming years.

The targets of SDG 13 aim to integrate climate change measures into national policies, enhance education, raising awareness on climate change mitigation, adaptation, impact reduction and early warnings. It also directs to implement the UNFCCC commitment to ensure efficient climate-change-related planning and management within developing and underdeveloped countries. One of the positive aspects of the COVID-19 pandemic concerning climate change has been the reduction in human activities in 2020, resulting in a temporary fall in CO<sub>2</sub> emissions. With the world attempting to move past the severe impact of the pandemic, emissions are only expected to increase in the coming time unless critical steps are taken to ensure the countries move towards carbon neutrality.

#### **SDG 13 has five targets. The three "outcome-oriented targets" are:**

**Target 13.1-** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

**Target 13.2-** Integrate climate change measures into national policies, strategies and planning

**Target 13.3-** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

#### **The two indicators are:**

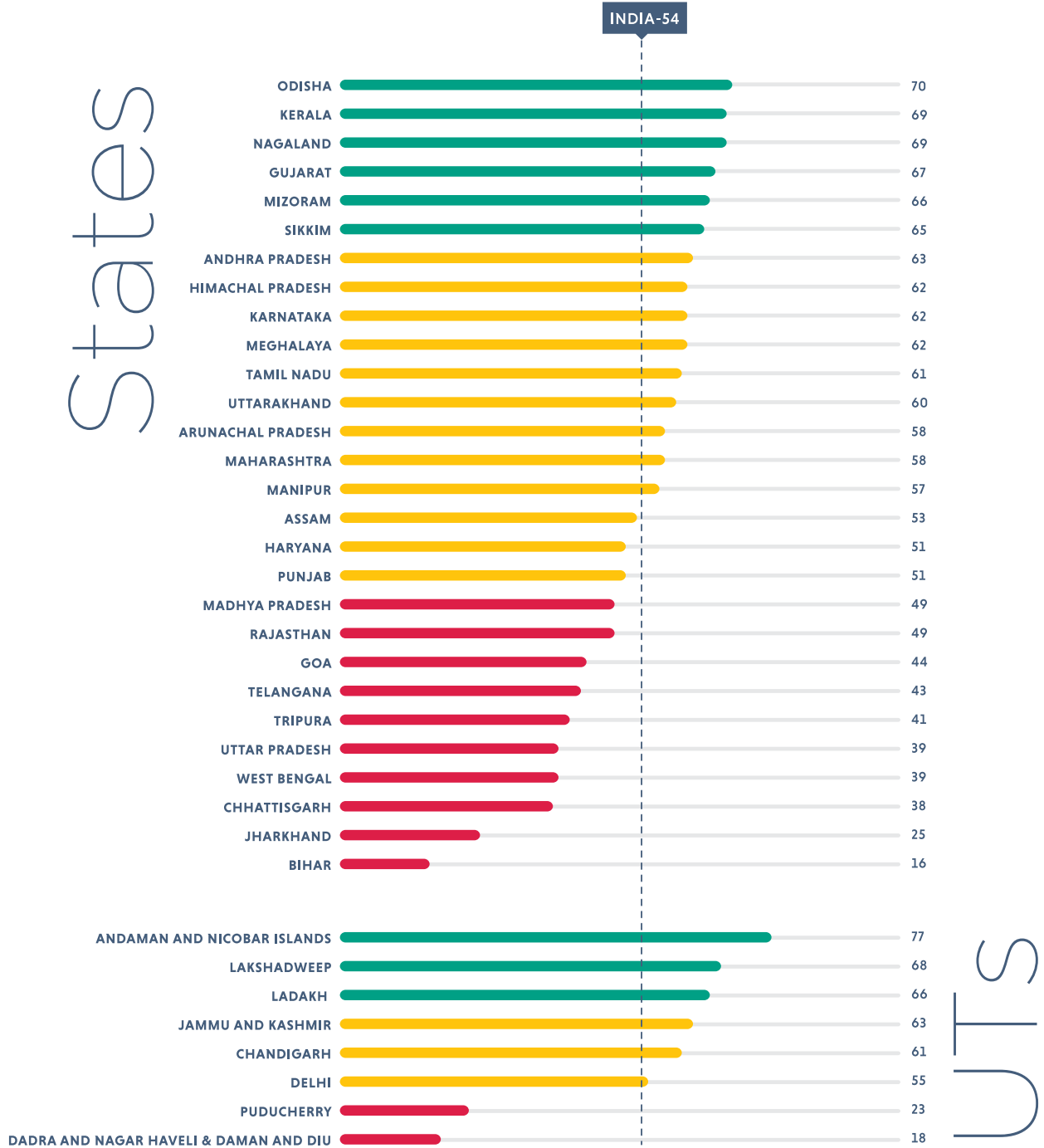
**Indicator 13.a-** Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.

**Indicator 13.b-** Promote mechanisms for raising capacity for effective climate change-related planning and management in the least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities \* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

### Status and Performance of Jharkhand and India on SDG-13

Jharkhand, with a composite score of 25 has been ranked in the “Aspirant” category against India’s average score of 54 (SDG India Index, 2021). It is ranked second lowest among all the states in India on this goal.

**Figure 36:** Index Score for Goal 9 of all States and UTs



Source: NITI Aayog, 2021a



**Table 39:** Status of Jharkhand, India and National Targets

Indicators	Jharkhand	India	Target
Number of human lives lost per 1 crore population due to extreme weather events	Null	15.44	0
Disaster preparedness score as per Disaster Resilience Index	7.5	19.20	50
Percentage of renewable energy out of total installed generating capacity (Including allocated shares)	9.48	36.37	40
CO2 saved from LED bulbs per 1,000 population (Tonnes)	37.15	28.24	103.22
Disability Adjusted Life Years (DALY) rate attributable to air pollution (per 1,00,000 population)	3117	3469	1442

Source: NITI Aayog, 2021

Table 39 shows that Jharkhand's performance is poorer than India's average in all indicators, except for the number of human lives lost per one crore population due to extreme weather events. The poor performing indicators for SDG 13 are:

The following four indicators are the most challenging to meet within the required timeline.

- Disaster preparedness score as per Disaster Resilience Index
- Percentage of renewable energy out of total installed generating capacity (Including allocated shares)
- CO2 saved from LED bulbs per 1,000 population (Tonnes) and
- Disability Adjusted Life Years rate attributable to air pollution (per 1,00,000 population)

### Scheme mapping & Critical Outcomes

Based on Goal 13 Climate Action's targets, Table maps all essential State and Central Government schemes and projects by concerned line departments contributing to achieving the targets and their identified indicators (See Table 40 in the appendix).

With more than 33 percent of its geographical area under forest and tree cover, Jharkhand is among the states with abundant natural resources. In order to maintain its resource abundance, the State, through its environmental policies, has been able to increase about 1,084 square kilometres of forest cover between 2001 to 2021. The following section covers the progress made under forest, mineral, groundwater, and energy resources in the State.

### Forest Resources

- According to the 2021 analysis, Jharkhand's total land covered under forest has increased from 28.40 per cent in 2001 to 31.51 per cent in the 2021 assessment (Figure 16.1). While Jharkhand's Forest area has increased by 1,084 square kilometres of forest cover in the State, there has been an increase of 1,275 square kilometres in the total forest and tree cover.
- One of the efficient indicators to assess the inter-transactional changes in forest and non-forest areas is the 'Forest Cover Change Matrix'. As per the Jharkhand Economic Survey, there has been an increase in forest cover by 110 square kilometres (open forest category), and 2 square kilometres (dense forest category), respectively. There has been a decline of 2 square kilometres in the moderately dense forest category and very dense forest category.
- The shrubs have also administered a fall of 104 square kilometres. The three districts with the maximum spread of forest clover are West Singhbhum (3,368 square kilometres), Latehar (2,403 square kilometres) and Chatra (1,782 square kilometres).

### **Reforestation and Afforestation**

- Through the Mukhyamantri Jan Van Yojana, the government of Jharkhand aims to increase the green cover area, enhancing the income of the people using the land as their source of income at the same time. According to the Jharkhand Economic Survey (2021-22), there has been an increase of about 17.19 lakh saplings between the years 2017-18 to 2020-21; 10.7 lakh of which is timber, and 6.4 lakh accounts for fruits. Moreover, in the year 2020-21 alone, a total of 348445 plantations took place, out of which 38% were fruit plantations, and 62% were timber plantations.
- With the Compensatory Afforestation Fund Management and Planning Authority (CAMPA) objective to promote afforestation and regeneration, more than 23 thousand crores of plants have been planted to cover a plantation of 15 hundred lakh hectares of land. In contrast, almost 55 thousand hectares of forest land has been used to ensure the enhancement of infrastructure such as roads/bridges (55 per cent), mining (29 per cent) and transmission line (6 percent) since 2003. For compensatory regeneration purposes, around 42 hundred hectares of land have also been received simultaneously under the FCA (Forest Conservation Act) projects. Moreover, around 190 hectares of land have been diverted against the 71 hectares of land received under the compensatory afforestation for 2021.

### **Energy**

- With great potential to contribute to renewable sources of energy, the government of Jharkhand has taken several initiatives to attain energy security. According to the data, coal contributed to 86.13 percent of the total 'installed capacity' in 2020, where 2359.18 MW of thermal energy was generated from government and private sources.
- Hydroelectricity share stands at 7.22 per cent of the total installed capacity, contributing to 191 MW of the state's electricity till September 2021. Renewable energy sources have contributed the least to the total installed capacity, where only 92.79 MW of electricity has been created. However, this number has increased since 2020, when it was only 47.41 MW.

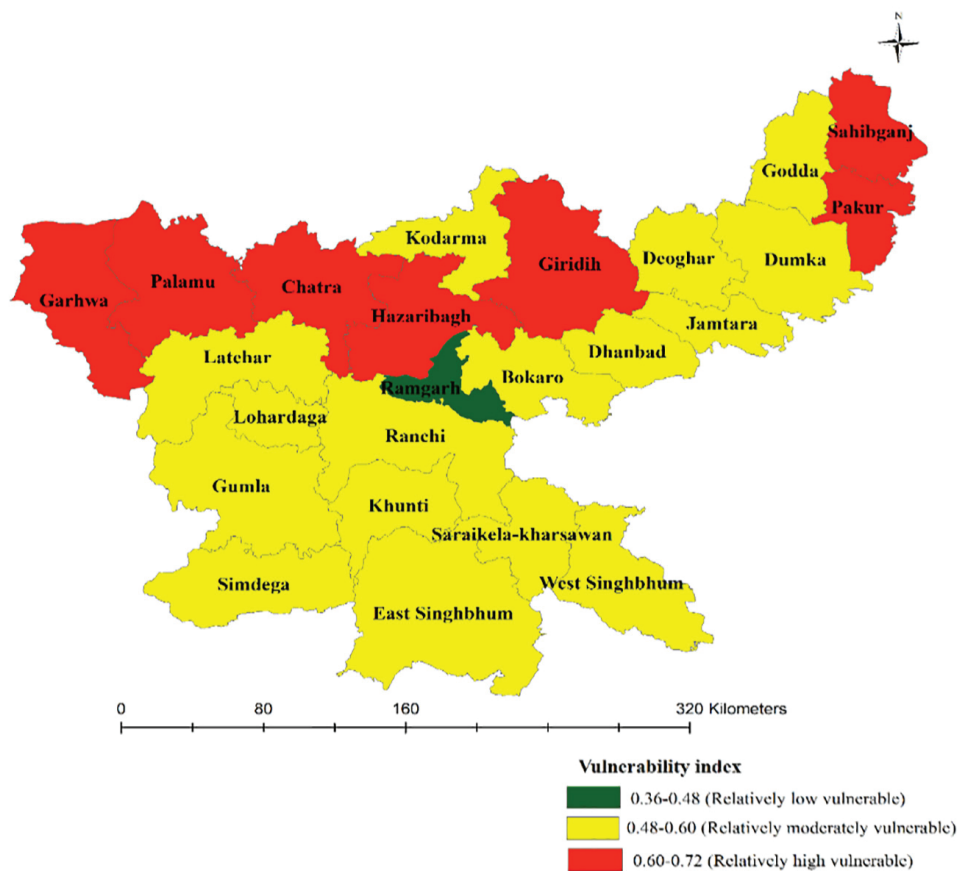
### **Climate Change**

- Climate change is one of the significant concerns of Jharkhand, owing to its high vulnerability due to rainfed agriculture, yield variability of food grains and marginal and small operational holders. The vulnerability indices have been distributed into three intervals which categorise the districts concerning
  - Relatively highly vulnerable
  - Relatively Moderately Vulnerable
  - Relatively low vulnerable.

Within the State, Sahib Ganj district accounts for the highest Vulnerability Index (0.72), while Ramgarh constitutes the lowest (0.37).

The following map shows the range of the Vulnerability Index across the various districts of Jharkhand.

**Figure 37:** Vulnerability Index for all Districts in Jharkhand



Conservation, reforestation, afforestation, compensatory afforestation and sustainable use of the forests have always been the policy of the government of Jharkhand. A total of 3.18 crore saplings have been planted under ‘Nadi Mahotsava and Vrihat Vriksharopan Abhiyan’ during the last three years, i.e., 2019, 2020 and 2021. Between the financial years 2017-18 to 2020-21, more than 17.19 lakh saplings of fruits and timbers have been planted under the ‘Mukhyamantri Jan Van Yojana’ in the state. Similarly, more than 4.2 thousand hectares of land have been received under the FCA projects by CAMPA for compensatory afforestation since 2000. Due to these conducive policies, the forest cover increased by 1,084 square kilometres between 2000 and 2021. The state has persistently maintained a forest and tree cover of about 33 per cent of its total geographical area.

### Way forward

As climate change is a persistent and complex development issue, the Jharkhand government should consider engaging an experienced and knowledgeable agency or personnel to advise on necessary actions. While some preliminary suggestions for future strategy and way forward are provided here, it will be prudent to engage with expert agencies before initiating any action.

According to NITI Aayog’s SDG India Index 3.0 (NITI Aayog, 2021), Jharkhand, with a score of 25, has been ranked as an ‘Aspirant’ category performer against India’s average score of 54. The Goal 13 indicators on which Jharkhand needs to accelerate improvement in its performance to achieve the national targets are as follows.

Table 42: Indicators of Concern for Jharkhand

Indicators	Jharkhand	India	Target
Disaster preparedness score as per Disaster Resilience Index	7.5	19.20	50
Percentage of renewable energy out of total installed generating capacity (Including allocated shares)	9.48	36.37	40
CO <sub>2</sub> saved from LED bulbs per 1,000 population (Tonnes)	37.15	28.24	103.22
Disability Adjusted Life Years (DALY) rate attributable to air pollution (per 1,00,000 population)	3117	3469	1442

Source: NITI Aayog, 2021

These indicators relate to the disaster preparedness of the state by increased investment in stepping up renewable energy generation installed capacity, implementation of energy efficiency improvement technologies across the state such as the use of LED bulbs and managing environmental pollution, especially air pollution.

The Jharkhand State Disaster Management Plan prepared under the National Disaster Management Act may need to be updated to incorporate disaster preparedness factors as per Disaster Resilience Index to improve the state's score. Similarly, the department responsible for disaster preparedness and disaster management (Department of Home, Jail & Disaster Management) should be institutionally strengthened and provided with the necessary resources, technology and funds to have an adequate disaster response infrastructure and system to manage any disaster the state may face.

At the same time, the Jharkhand government should prioritize updating and implementing the recommendations made in the Jharkhand – Action Plan on Climate Change (Government of Jharkhand, 2014). To combat climate change, the Jharkhand – Action Plan on Climate Change recommends that the state adopt a two-pronged approach.

The report says<sup>1</sup>, “The state will have to invest heavily to safeguard the welfare interests of the population, especially tribal who suffer from acute poverty. Ensuring adequate and quality water and food will become the state's priority. Due to stress on the stock and flow of natural resources (water, agriculture, forestry), supplies of critical inputs to the economy will dwindle. All the sectors will have to invest in technologies and processes to improve their performance and at the same time reduce emissions”.

The report provides sector-wise detailed actions, the actions being based on the need to make the selected sectors climate-proof. Hence, most suggested measures are innovative and must match the existing departmental plans (BAU approach). Thus, it will be required for the state to develop departments' capacities to comprehend the climate change issue and its impacts and accordingly make climate change-linked planning an integral part of the departmental planning process.



## References

1. Bhattacharya, M., & Banerjee, P. (2021). Covid-19: Indices of economic and health vulnerability for the Indian states. *Social Sciences & Humanities Open*, 4(1), 100157. <https://doi.org/10.1016/j.ssaho.2021.100157>
2. Briggs, D., Ellis, A., Lloyd, A., and Telford, L. (2020). New hope or old futures in disguise? Neoliberalism, the COVID-19 pandemic and the possibility for social change. *Int. J. Sociol. Soc. Policy*40, 831–848. Doi: 10.1108/IJSSP-07-2020-0268
3. Blundell, R., Griffith, R., Levell, P., and O’Connell, M. (2020). Could COVID-19 infect the consumer prices index? *Fisc. Stud.* 41:2. Doi: 10.1111/1475-5890.12229
4. Census of India (2011), <https://censusindia.gov.in/2011Census/pes/Pesreport.pdf>
5. Cities and the Sustainable Development Goal 11 [https://smarnet.niua.org/sites/default/files/resources/cities\\_layout\\_with\\_cover.pdf](https://smarnet.niua.org/sites/default/files/resources/cities_layout_with_cover.pdf)
6. Covid Impact and analysis on sustainable development goal and the way forward [https://ijpsl.in/wp-content/uploads/2021/03/COVID-19-Impact-Analysis-on-Sustainable-Development-Goals-and-the-Way-Forward\\_Sakshi-Jain.pdf](https://ijpsl.in/wp-content/uploads/2021/03/COVID-19-Impact-Analysis-on-Sustainable-Development-Goals-and-the-Way-Forward_Sakshi-Jain.pdf)
7. Centre for Fiscal Studies. Planning-cum-Finance Department, Government of Jharkhand. (2021). Jharkhand Economic Survey 2020-21. Retrieved from [https://finance.jharkhand.gov.in/pdf/Economic\\_Survey\\_2020\\_21/Jharkhand\\_Economic\\_Survey\\_2020\\_21.pdf](https://finance.jharkhand.gov.in/pdf/Economic_Survey_2020_21/Jharkhand_Economic_Survey_2020_21.pdf)
8. Government of Jharkhand, 2014. Jharkhand Action Plan on Climate Change. Government of Jharkhand, Ranchi
9. Government of Jharkhand, 2021. Jharkhand Economic Survey 2020-21. Ranchi
10. Government of Jharkhand, 2022. Jharkhand Economic Survey 2021-22. Ranchi
11. Health in India (2019), Report No. 586, NSS 75th round, Ministry of Statistics and Program Implementation, Government of India, New Delhi.
12. Iea. (2021). India Energy Outlook 2021 – analysis. IEA. Retrieved from <https://www.iea.org/reports/india-energy-outlook-2021>.
13. International Institute for Population Sciences (IIPS) and ICF. 2017. National Family Health Survey (NFHS-4), 2015-16: India. Mumbai: IIPS.
14. International Institute for Population Sciences (IIPS) and ICF. 2021. National Family Health Survey (NFHS-5), 2019-21: India: Volume I. Mumbai: IIPS.
15. Mehta S, Saxena T, Purohit N. The New consumer behaviour paradigm amid COVID-19: Permanent or Transient? *Journal of Health Management.* 2020;22(2):291–301. doi: 10.1177/0972063420940834.

16. Niti Aayog, 2020. SDG India: Index and Dashboard 2019-20. Niti Aayog, New Delhi
17. Niti Aayog, 2021. SDG India: Index and Dashboard 2020-21. Niti Aayog, New Delhi
18. Naeem, M. (2020). Understanding the customer psychology of impulse buying during COVID-19 pandemic: implications for retailers. *Int. J. Retail. Distrib. Manag.* 49, 377–393. Doi: 10.1108/IJRDM-08-2020-0317
19. Oxford Poverty and Human Development Initiative (OPHI), University of Oxford . (2018). Global multidimensional poverty index 2018 – Ophi. Retrieved from [https://ophi.org.uk/wp-content/uploads/G-MPI\\_2018\\_2ed\\_web.pdf](https://ophi.org.uk/wp-content/uploads/G-MPI_2018_2ed_web.pdf)
20. Punita, J., & Tiwari, N. (2020). Sustainable Development of Jharkhand through Corporate Social Responsibility: Analyzing Healthcare, Drinking Water & Sanitation. Retrieved from <https://ijcrt.org/papers/IJCRT2003190.pdf>
21. Sustainable development goals (SDG 1). United Nations Western Europe. (2020). Retrieved from <https://unric.org/en/sdg-1/>
22. United Nations. (n.d.). Ending poverty. United Nations. Retrieved from <https://www.un.org/en/global-issues/ending-poverty>
23. UN, 2021. Progress towards the Sustainable Development Goals: Report of the Secretary-General <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/109/71/PDF/N2110971.pdf?OpenElement>
24. UNESCO (2021). 100 million more children under the minimum reading proficiency level due to COVID-19. Retrieved from <https://en.unesco.org/news/100-million-more-children-under-minimum-reading-proficiency-level-due-covid-19-unesco-convenes>
25. World Bank. (2021). Measuring poverty. Retrieved from <https://www.worldbank.org/en/topic/measuringpoverty>
26. Goal 9: Industry, innovation and infrastructure. UNEP. (n.d.). Retrieved February 14, 2023, from <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-9>







# Appendix

## Appendix - I

### Scheme Mapping

**Table 2: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 3)**

Department Name	State Scheme Name	Central Scheme Name	State Budget Allocation	State Budget Allocation	Outcomes
			FY 2021-22 (in lakhs)	FY 2022-23 (in lakhs)	
Health, Medical Education and Family Welfare Department	National Rural Health Mission	National Rural Health Mission	13,35,00	1,46,700	Improved utilization of primary care services and screening & management of NCDs
					Increased availability of drugs and diagnostics at public health facilities
					strengthening of public health facilities to provide quality healthcare services; improved utilization of NQAS/LaQshya certified public health facilities and FRUs
					Improved utilization of public health facilities
					patients receiving free dialysis care
					Reduction in anemia contributing to reduction of Maternal Mortality Ratio (MMR)
					Increased access to safe delivery services contributing to reduction of Maternal Mortality Ratio (MMR)
					Assured quality and respectful maternity care at birth contributing to reduction of Maternal Mortality Ratio (MMR)
					Quality care at birth contributing to reduction of Maternal Mortality Ratio (MMR)
					Reduction of Under 5 Mortality Rate (U5MR)
					Reduction of Total fertility Rate to 2.3 by 2023
	Management of higher number of sick newborns in SNCU will result in reduction of newborn deaths				
	National Urban Health Mission	National Urban Health Mission	50,00	5,500	Improved access to quality healthcare in Urban area
Reduction in Maternal Mortality Ratio (MMR)					
Reduction in Infant Mortality Rate (IMR)					

Department Name	State Scheme Name	Central Scheme Name	State Budget Allocation	State Budget Allocation	Outcomes
			FY 2021-22 (in lakhs)	FY 2022-23 (in lakhs)	
Health, Medical Education and Family Welfare Department	Mukhya Mantri Gambhir Bimari Upchar Yojana, Mukhya Mantri Nishulk Diagnostic and Radiology Tests Scheme and Mukhya Mantri Nishulk Breast & Cervical Cancer Screening Scheme		80,00	8000	Reduction in household health expenditure
	Ayushman Bharat- Mukhyamantri Jan Aarogya Yojana		3,50,00	1,00,00	Reduction in household health expenditure
	Pradhan Mantri Jan Aarogya Yojana	Ayushman Bharat – Pradhan Mantri Jan Aarogya Yojana	86,00	9,505	Reduction in household health expenditure
	Pradhan Mantri Ayushman Bharat Health Care Infrastructure Mission	Pradhan Mantri Ayushman Bharat Health Care Infrastructure Mission	NA	54,279	Strengthening public health institutions and public health governance capacities, to meet challenges posed by the current and future pandemics/epidemics with capacities for comprehensive diagnostic and treatment including for critical care services
	Adolescent Health Care Scheme		NA	3,000	Anemia control among adolescent girls
	Baby Health Care Scheme		NA	3,000	Reduction in Infant Mortality Rate (IMR)
	Regional Clinics- Haat / Mohalla / Slum / etc.		5,00	1,500	Improved access to health services
	Mukhya Mantri Haat-Bazar, etc, Clinic		5,00	1,000	Improved access to services

Department Name	State Scheme Name	Central Scheme Name	State Budget Allocation	State Budget Allocation	Outcomes
			FY 2021-22 (in lakhs)	FY 2022-23 (in lakhs)	
Health, Medical Education and Family Welfare Department	National Mission on AYUSH	National Mission on AYUSH	27,13.40	4,000	To increase the availability of ayurvedic doctor seats
					Strengthened AYUSH health system
					Increased number of ayurvedic doctors
	Ranchi Institute of Neuro – Psychiatry and Allied Sciences (Rinpas)		10,59.26	1,500	Improved coverage of mental health services
					Improved availability of mental health professionals
	Rajendra Institute of Medical Sciences (Rims)		2,20.00	25,000	Improved medical education and access to health services
To increase availability of doctors					
Increase in OPD/IPD member					
Women, Child Development and Social Security Department	Medicine Kits	Saksham Anganwadi and Poshan 2.0	5,60	560	Promote healthy lives and well being for all.
	Integrated Child Protection Scheme	Mission Vatsalya (Child Protection Services and Child Welfare Services)	40,00	3,000	To institutionalize and strengthen institutional care
	Strengthening Of AWC		25,00	5,527.01	Safe and hygienic environment for holistic development of children upto 6 years
	Pradhan Mantri Matru Vandana Yojana	Samarthya	49,00	4,917	Improved health seeking behaviour amongst the pregnant women and lactating mothers
	Poshan Abhiyan Scheme	Saksham Anganwadi and Poshan 2.0	87,90	8,834	Strengthened ICDS policy framework, systems and capacities, and improved community engagement, for greater focus on children under three years of age, Lactating Mother and Pregnant women
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Maintenance of Rural Hospital		20,25	3,025	Improved access to primary health facilities
	Chief Minister's Health Assistance Scheme		NA	1,200	Support to the beneficiaries during the time of economic hardship due to diseases

Source: Planning Department, Government of Jharkhand

**Table 5: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 6)**

Department Name	State Scheme Name	Central Scheme Name	State Budget Allocation FY 2021-22 (in lakhs)	State Budget Allocation FY 2022-23 (in lakhs)	Outcome Indicators & Targets	Outcomes
Drinking Water and Sanitation Department	Urban Water Supply		1,10,00	13000.00	No. of People have access to adequate drinking. Reduced water-borne diseases among urban population (2200000)	People have access to adequate drinking water and reduction in water-borne diseases
	Rural Pipe Water Supply Scheme		4,21,25	18243.50	Safe and adequate drinking water provided to people in state (961375)	Coverage of safe and adequate drinking water will increase
	Rural Pipe Water Supply (Operation – Maintenance)		30,00	4000.00	Continuous safe and adequate water supply to the rural population (1343250)	Operation and maintenance of all rural PWS schemes
	Rural Water Supply (Drilled Tube Well/Well)		2,15,72.50	5000.00	Installation of drilled tube well (843) Repair & maintenance of drilled tube (5053)	Remote habitations connected with safe and adequate drinking water
	Nirmal Bharat Abhiyan	SBM-Rural (DWS)	3,98,94.00	5000.00	Rural population have access to a toilet and continued behaviour change for cleanliness (7984756)	Households in rural areas have access to a toilet and continued behaviour change for cleanliness
	Jal Jeevan Mission / National Rural Drinking Water Mission	Jal Jeevan Mission / National Rural Drinking Water Mission	20,00,00	153010.02	Safe adequate drinking water provided to people in the state (10040000)	Coverage of safe adequate drinking water will increase

Department Name	State Scheme Name	Central Scheme Name	State Budget Allocation FY 2021-22 (in lakhs)	State Budget Allocation FY 2022-23 (in lakhs)	Outcome Indicators & Targets	Outcomes
Urban Development and Housing Department (Urban Development Division)	Swachh Bharat Mission (Including Solid Waste Management)	Swachh Bharat Mission – Urban	78,85	9172.00	Number of statutory towns which maintained ODF (41) Average% of waste processed out of total waste collected (60) No. of functionaries trained (205)	-All statutory towns became open defecation free (ODF) -Improved waste management and processing capacity -Improvement in urban service
	Urban Projects in Water Supply, Solid Waste Management, Sewerage and Drainage, Civic Infrastructure Housing, etc.		4,50,00	49166.00	Percentage of households connection (5) 1. No. of septic tanks covered for cleaning and waste disposal (184000) 2. No. of people of Jharkhand get benefitted from sanitation measures (920000) 3. Treated water (in KLD) (170) Number of buildings (2) Percentage of civic work done (40) Percentage of civic work done (30), (15) Percentage of civic work done (70)	-2,53,899 households in urban areas will get tap water facility -Safe disposal of human waste as an essential factor for improved health and improved sanitation. Treated water will be used for vegetation, gardening etc. - Completion of building -Reduction in traffic congestion resulting in smooth mobility -Movement of heavy vehicle will be avoided in city areas resulting in a reduction of traffic congestion Reduction in traffic congestion resulting in smooth mobility. Also, the construction of utility ducts will avoid future damage to roads caused by pipe construction etc. better and safe pedestrian movement and smooth mobility of vehicles

Source: Planning Department, Government of Jharkhand

**Table 8: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 7)**

Department Name	State Scheme Name	Central Scheme Name	State Budget Allocation FY 2021-22	State Budget Allocation FY 2022-23	Outcomes
Energy Department	Power System Development Fund		NA	NA	NA
	Deendayal Upadhyaya Gram Jyoti Yojana		NA	NA	NA
	Atal Grameen Jyoti Yojana		NA	NA	NA
	Rural Electrification under Saubhagya Scheme for JBVNL		NA	NA	NA
	Integrated Power Development Scheme		NA	NA	NA
	State Contribution to JUSNL under Jharkhand Power System Improvement Project		NA	NA	NA
	State Contribution to JBVNL under Jharkhand Power System Improvement Project		NA	NA	NA
	World Bank Funded Transmission Projects		NA	NA	NA
	New Project (Coal Blocks – Power Plant)		NA	NA	NA
	Revamped Distribution Sector Scheme		NA	NA	NA
	Capital Maintenance Work under Electric Works Division		NA	NA	NA
	Metering and Energy Accounting Project		NA	NA	NA
	Tariff Subsidy Through JBVNL for Consumers		NA	NA	NA
JREDA Programme		NA	NA	NA	

**Table 10: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 10)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Minority welfare development department- construction of hostel for minority girls and boys student	Na	1,65	2,000.00	Improvement in the infrastructure and living conditions in minority hostels
	Cycle scheme	Na	22,00	2200.00	Reduction in dropout rate
	Concrete boundary for graveyard	Na	30,00	10,000.00	security of the burial places of minorities
	Grant-in-aid to working planning by finance nigram and minority development	Na	3,00	2500.00	Improvement in livelihood security of the targeted community
	Vocational training/skill development	Na	1,00	150.00	skill development and employment generation
	Pradhan mantri jan vikas karyakaram	Pradhan mantri jan vikas karyakaram		52,00	5000.00

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Construction of minority boys and girls residential school	Na	6,00	5000.00	access to residential education
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Marang gomke jaipal singh munda overseas scholarship scheme for minority	Na	10,00	200.00	access to minority students to world class education
Rural Development Department	Birsa vishist janjati ulfil yojna	Na	1,00	100.00	Mainstreaming of PVTG HH and providing sustainable livelihoods to the families
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Na	Post-matric scholarship-scs	97,00	2600.00	Enable completion of post-matric education of SC students
	Na	Development of particularly vulnerable tribal groups	20,00	2700.00	Improvement in socio-economic infrastructure and basic amenities in identified sectors by focussing on education health agriculture ulfilnt housing habitat and others
	Na	Post matric scholarship-tribal	97,00	9700.00	Enable completion of post-matric education of ST students
	Na	Special central assistance to tribal sub-schemes	1,37,00	13,000.00	completion of activities and benefit to the ST residents of the villages
	Na	Grants under proviso to article 275(1) of the constitution	1,48,00	15000.00	Improvement in socio-economic infrastructure and basic amenities in identified sectors by focussing on education health agriculture livelihood housing habitat and others
	Na	Pradhan Mantri Anusuchit Jaati Abhyuday Yojana (PM AJAY)	NA	4,000.00	Completion of activities and benefit to the population
	Na	Pre matric scholarship-tribal	35,00	3500.00	Enable completion of pre-matric education of ST students
	Na	Pre-matric scholarship for sc students	10,00	1000.00	Enable completion of pre-matric education of ST students
	Na	Post matric scholarship for obcs, ebcs and dnst- pm yavasvi	55,00	5,500.00	Enable completion of post-matric education of BC students
	Na	Strengthening of machinery for enforcement of protection of civil rights act 1955 and prevention of atrocities act 1989 (dama)	Strengthening of machinery for enforcement of protection of civil rights act 1955 and prevention of atrocities act 1989 (dama)	2,00	200.00



Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Strengthening of machinery for enforcement of protection of civil rights act 1955 and prevention of atrocities act 1989 (dama)	Strengthening of machinery for enforcement of protection of civil rights act 1955 and prevention of atrocities act 1989 (dama)	8,00	800.00	active participation and inclusion of SC/STs in society at large elimination of offence of untouchability and discrimination against SCs/STs. Increase in number of cases resolved in the court under PCR Act 1955
	Pre matric scholarship for OBCs, EBCs and DNTS-PM Yasasvi	Pre matric scholarship for OBCs, EBCs and DNTs- PM Yasasvi	12,00	1200.00	Enable completion of pre-matric education of BC students
	Cycle scheme	Na	1,00,00	10100.00	Reduction in dropout rate
	Vocational training/skill development	Na	1,00	100.00	Skill development and generation of employment opportunities Increase in availability of trained youth
	Grants to schedule caste residential school run by NGO's	Na	75	75.00	Improved access of SSC students to residential education
	Grants in aid to SCDC	Na	3,00	2500.00	Improvement in livelihood security of targeted community
	Renovation of hostel	Na	12,50	1250.00	Improvement in the infrastructure and living conditions in BC hostels
	Post matric-entrance scholarship (including 2% administrative expenses)	Na	25,00	2500.00	Enable completion of post-matric education of SC students
	Vocational training/skill development	Na	1,00	100.00	Skill development and generation of employment opportunities
	Backward class development corporation assistance grants	Na	3,00	2500.00	Improvement in livelihood security of the targeted community
	Vocational training/skill development	Na	1,00	100.00	Skill development and generation of employment opportunities
	Maintenance of rural hospital	Na	20,25	3025.00	improved access to primary health facilities
	Grants-in-aid to TCDC	Na	3,00	2500.00	Improvement in livelihood security of targeted community
	Renovation and construction of residential school(sc)	Na	4,00	400.00	improved access to education
	Renovation of hostel(sc)	Na	1,50	200.00	Improvement in the infrastructure and living conditions in SC hostels
	Construction of tribal art and culture centre/ manjhi, pargana, parha, manki-munda, dhumkudia house and manjhi than shed	Na	1,00,00	8550.00	Increased preservation of tribal art and culture
	Renovation and construction of residential school	Na	22,45	3200.00	strengthening of schools improved access to education
Birsa awas yojana	Na	25,00	2500.00	Better housing for the beneficiaries	

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Scheduled Tribe, Scheduled Caste, Minority and Backward Class Welfare Department	Conservation and development of sarna/jaheersthan/hargandi & masna	Na	20,00	17500.00	Improvement in security and development of sacred places of tribals
	Shaheed gram vikas yojana	Na	5,00	500.00	development of selected villages as model villages
	Grants to schedule tribe residential schools run by ngo's	Na	16,00	2000.00	Improved access of ST students to residential schools
	Scheme for upliftment of pvtg villages	Na	5,00	500.00	Strengthened basic infrastructure and source of livelihood in PVTG dominated areas.
	Marang gomke jaipal singh munda overseas scholarship scheme	Na	10,00	1400.00	Access to ST, SC and BC students to world class education
	Pre matric scholarship (class i to viii)	Na	40,00	13,300.00	Enable completion of pre-matric education (class I-VIII) of ST, SC and BC students.
	Pre matric scholarship (class ix to x)	Na	35,00	13,500.00	Enable completion of pre-matric education (classIX-X) of ST, SC and BC students.
	Mukhmantri pasudhan vikas yojna	Na	NA	2,194.00	Income generation and livelihood security of the beneficiaries
	Chief minister's health assistance scheme	Na	NA	1200.00	Support to the beneficiaries during the time of economic hardship due to diseases
Women, Child Development and Social Security Department	Na	Schemes for differently abled persons	50,95	7268.87	Increased accessible infrastructure for divyangjans
	Nsap programme ulfil ulfil national disability pension scheme	Indira ulfil national disability pension scheme(IGNDPS)	37,93	3292.00	Providng social assistance to the disabled segment of the society
	Welfare of disabled	Na	9,50	600.00	Support system for PWD
	Operation of schools/ rehabilitation centre/ hostels/homes etc.	Na	5,00	500.00	To institutionalise and strengthen institutional care for senior citizens, disabled and destitutes.
	Tejaswini scheme	Na	1,19,12.97	10,012.00	To improve the completion of market driven skill trainignand secondary education for adolescent girls and young women in selected districts of Jharkhand
	Scheme for eradication of bad practices and encouragement to good practices	Na	2,00	200.00	Creation of a support system for prevention of social evil and promotion of good practices in society.

Source: Planning Department, Government of Jharkhand

**Table 13: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 11)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Urban Development And Housing Department (Urban Development Division)	NA	Grants For Local Bodies Urban	8,13,00	81300.00	Community access to basic services will be improved and community quality of life will be improved Real time air quality can be monitored
	Urban Transport System	NA	1,10,00	11000.00	Better traffic and transport amenities and infrastructure in urban areas
	Civic Amenities	NA	1,65,00	16500.00	Beautiful and hygienic cities would be developed with proper drainage system Improve basic & community amenities Sanitation and cleaning works enhance the hygiene in concerned urban area.
	Externally Aided Projects (Eap)	NA	2,50,00	25000.00	122872 water tap connections will be provided to the Citizen of 15 ULBs Movement of heavy vehicle will be avoided in city area resulting in reduction of traffic congestion and smooth mobility Ensure reduction in time & cost to the public due to less congestion of traffic and less consumption of fuel. Better and safe pedestrian movement Petrol stations, shopping centres and some other businesses are built resulting in boosting local economy. 116989 water tap connections will be provided to the Citizen of 4 ULBs
	National Urban Livelihood Mission (NULM)	National Urban Livelihood Mission -State Component	50,00	3000.00	Improved livelihoods of urban poor To provide 24/7 all weather shelters to urban homeless Improved access to financial inclusion among urban poor The mobilization of urban poor households to form their own institutions is an important investment for an effective and sustainable poverty reduction programme
	Swachh Bharat Mission (Including Solid Waste Management)	Swachh Bharat Mission (SBM) – Urban	78,85	19804.00	All statutory towns became open defecation free (ODF) Improved waste management and processing capacity Improvement in urban service delivery
	Urban Renewal Mission-AMRUT	Urban Rejuvenation Mission-500 Cities	1,00,00	20000.00	Universal coverage to watersupply in household premises of all mission cities Improved access to sewerage and septage management for household premises of all mission cities Development of green spaces and access to clean surface water Improvement in urban service delivery
	Pradhan Mantri Awas Yojana (PMAY)	Other Items Of State/Ut Component-PMAY Urban	3,60,00	36000.00	1.75 lakh people will get pucca houses and ulfil 90% will have ownership/joint ownership of female in the family

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Urban Development And Housing Department (Urban Development Division)	Urban Projects in Water Supply, Solid Waste Management, Sewerage & Drainage, Civic Infrastructure Housing Etc	NA	4,50,00	49166.00	2,53,899 household in urban areas will get tap water facility Safe disposal of human waste as an essential factor for improved health and sanitation. Also treated water will be used for vegetation and gardening. Completion of building -Reduction in traffic congestion resulting in smooth mobility -Movement of heavy vehicle will be avoided in city areas resulting in a reduction of traffic congestion Reduction in traffic congestion resulting in smooth mobility. Also, the construction of utility ducts will avoid future damage to roads caused by pipe construction etc. Better and safe pedestrian movement and smooth mobility of vehicles
	Grants To RDA For Land Acquisition, Infrastructure Development & Capacity Building	NA	15,00	1500.00	Better civic amenities and infrastructure in regional development authority areas
	Grants For Mukhyamantri SHRAMIK (Shahri Rozgar Manjuri for Kamgar) Yojna	Na	10,00	500.00	Provide ulfilnt wage employment to the adult members of urban households who are willing to do unskilled labour subject to a maximum 100 days per job card in financial areas
Women, Child Development and Social Security Department	ICDS Establishment (224 Projects + 20 DSWO Offices)	Saksham Anganwadi and Poshan 2.0(Umbrella ICDS- Anganwadi Services Poshan Abhiyan Scheme for Adolescent Girls National Creche Scheme)	5,83,90.03	51908.56	Institutions, offices are well equipped and fully functional for proper operationalisation of AWCs.

Source: Planning Department, Government of Jharkhand

**Table 15- Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 15)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Agriculture, Animal Husbandry and Co-Operative Department (Animal Husbandry Division)	Integrated Sample Survey of Milk, Egg, Meat and Wool Production	Development Programme	20.00	10.00	Help to create plan for livestock and rearers
Forest, Environment and Climate Change Department	Permanent Nurseries - Seed Orchards	Na	2,00	200.00	seedling seed orchard and seed production area ensured the creation of seed areas and production desirable seeds
	Wildlife Conservation	NA	20,00	1600.00	reduced wildlife and forest offences in protected areas
	Forest Management Facilities	NA	45,00	5000.00	Increase in the capacity and production development to upkeep the forest and forest facilities
	Training Facilities	NA	11,00	1200.00	Maintenance of 3 research nursery , training of forest staff/officers/ JFMCs and publicity work
	Participatory Forest Mgmt. Project	NA	1,09.27	110.00	Increase in the awareness of people
	Integrated Development of Wildlife Habitat	Integrated Development of Wildlife Habitats	10,00	500.00	Better habitat created for wildlife, increased soil and water conservation
	Grant-In-Aid To Jharkhand State Zoo Authority	Na	8,00	1200.00	Maintenance of zoo, food to animals and birds in zoo, salary to officers and staff
	Grant-In-Aid To Jharkhand State Biodiversity Board	Na	6,00	500.00	Constitution of biodiversity management committee, creation of biodiversity register and documentation etc.
	Conservation of Natural Resource and Ecosystem	Conservation Of Natural Resources And Ecosystem	1,00	100.00	Increase in the awareness of people
	Consolidation Of Forest Boundaries	NA	20,00	1,000.00	Better recognition of forest boundaries lead to identification detection, avoidance and control of forest offences and encroachment of forest in particular
	Grants-In-Aid To Airparks	NA	2,00	300.00	Development and maintenance of sidhu-kanhu park and Nakshtra Van, salary to officers and staff
	Green India Mission	Green India Mission-National Afforestation Programme	5,00	100.00	Increasing in greening and awareness of people
	Eco - Tourism	Na	4,00	800.00	Basic infrastructure in Dalma and Betla

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Forest, Environment and Climate Change Department	Jharkhand State Climate Change Action Unit	Na	45	10.00	Increase in awareness of the people
	Afforestation & Soil Conservation on Notified Forest Land	Na	90,00	11320.00	Increase in the quality and quantity of forest cover Increase in the CO2 absorption thereby reducing climate change Increase in biodiversity of flora and fauna Creation of man-days for the local people Increase in soil and water conservation Increase in the livelihood opportunities of the local people
	Afforestation On Land Outside Notified Forest	Na	27,00	3500.00	Increase in the quality and quantity of forest cover Increase in the CO2 absorption thereby reducing climate change Increase in biodiversity of flora and fauna Creation of man-days for the local people Increase in soil and water conservation Increase in the livelihood opportunities of the local people
	Project Elephant	Project Elephant	5,00	500.00	Construction of water harvesting structure, constitution of anti depredation squad, construction of ponds, purchasing of salt licks etc.
	National Afforestation Programme (Nap)	National Afforestation and Eco Development Board (NAEB)	1,00	10.00	Better management of joint forest management facilities
	National Bamboo Mission	National Bamboo Mission	8,00	500.00	Awareness of the local people towards bamboo plantation and better income
	Integrated Wildlife Management Plan	NA	18,04.38	4000.00	Improve wildlife habitat by providing water harvesting structure, planting fruit trees and other sustainable species Maintaining corridor of wildlife reduce man-animal conflict in 24 forest divisions
	Grants-In-Aid To Palamau Tiger Conservation Foundation	NA	7,50	950.00	Maintenance and development of Palamu tiger reserve, food to animals, development of grass land

Source: Planning Department, Government of Jharkhand

**Table 20: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 16)**

Department	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Agriculture, Animal Husbandry and Co-operative Department (Animal Husbandry Division)	Establishment Of Cow Mukti Dham		1,00	50.00	Improved public service delivery
Panchayati Raj Department		Grants For Local Bodies Rural	21,25,36	1,30,000	GPs having community infrastructure GPs having drinking water infrastructure Improved access of road connectivity GPs having sanitation infrastructure ZPs having community infrastructure ZPs creating access to safe drinking water infrastructure in GPs ZPs creating community sanitation infrastructure BPs having community infrastructure BPs creating access to safe drinking water infrastructure in GPs
Panchayati Raj Department	Mukhya Mantri Panchayat Protsahan Puraskar Yojana		2,00	1,000.00	Best performing local bodies awarded
Panchayati Raj Department	Capacity Building & Training		5,00	2,000.00	Holding of gram sabha and upgradation of schemes in e-gram swaraj portal

Department	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Panchayati Raj Department		Rashtriya Gram Swaraj Abhiyan (RGSA)	45,00	10,000.00	Capacity development of elected representatives and functionaries Availability of learning facilities at the panchayat level Improvement in infrastructure and facilities in the gram panchayat enhanced capabilities of ulfilnt for good governance and attainment of SDGs through participatory local planning, democratic decision making, transparency and accountability Functional panchayat bahawan Gram Panchayat secretariat fully functional
Women, Child Development And Social Security Department	ICDS (Strengthening and Restructuring) (Capital)	Saksham Anganwadi and Poshan2.0(Umbrella ICDS-Anganwadi Services Poshan Abhiyan Scheme For Adolescent Girls National Creche Scheme)	1,00	1,00.00	Children, Adolescent girls and women have ulfilnt centers for receiving health and nutrition and referral services
Women, Child Development and Social Security Department	Construction/ Maintenance Up-Gradation of AWCs Under ICDS	Saksham Anganwadi and Poshan 2.0(Umbrella ICDS-Anganwadi Services Poshan Abhiyan Scheme for Adolescent Girls National Creche Scheme)	19,90	13176.70	Children, Adolescent girls and women have accessible centers for receiving health and nutrition and referral services

Source: Planning Department, Government of Jharkhand



**Table 22: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 5)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Women, Child Development and Social Security Department	ICDS Establishment	Saksham Anganwadi and Poshan 2.0 – Scheme for Adolescent Girls	5,83,90.03	51,908.56	Institutions, Offices are well equipped and fully functional for proper operationalization of AWCs
	SNP for Pregnant – Lactating Women and Children	Saksham Anganwadi and Poshan 2.0	9,07,14	89,079.79	Enhancing capability of families to look after health & nutrition of Child, Pregnant Women, Lactating Mother.
	Poshan Abhiyan Scheme	Saksham Anganwadi and Poshan 2.0	87,90	8,834	Strengthened ICDS policy framework, systems and capacities, and improved community engagement, for greater focus on children under three years of age, Lactating Mother and Pregnant women
	Pre-School Kits	Saksham Anganwadi and Poshan 2.0	20,00	1,920	Availability of early childhood education and care Infrastructure at the AWCs
	Integrated Child Protection Scheme	Mission Vatsalya (Child Protection Services and Child Welfare Services)	40,00	3,000	To institutionalize and strengthen institutional care
	Strengthening Of AWC		25,00	5,527.01	Safe and hygienic environment for holistic development of children upto 6 years
	Operation Of Schools / Rehabilitation Centre / Hostels / Homes etc.		5,00	500	To institutionalize and strengthen institutional care for senior Citizens disabled and destitute women
	Tejaswini Scheme		1,19,12.97	10,012.97	To improve completion of market- driven skills training and secondary education for adolescent girls and young women in select districts of Jharkhand

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Women, Child Development and Social Security Department	Pradhan Mantri Matru Vandana Yojana	Samarthya	49,00	4,917	Improved health seeking behaviour amongst the pregnant women and lactating mothers
	Mukhya Mantri Sukanya Yojana		1,29,70	11,479	Women empowerment, ensuring education of girl child, discouraging child marriage
	Mukhya Mantri Kanyadan Yojana		30,00	2,400	Women empowerment and preventing child marriage
	NSAP Programme Indira Gandhi National Old Age Pension Scheme (For the pensioners of the age of 60-79 years)	Indira Gandhi National Old Age Pension Scheme	11,37,76	1,13,572.60	Providing social assistance to the poorest of poor segment of the society
	NSAP Programme Indira Gandhi National Old Age Pension Scheme (For the pensioners of the age of 80 years and above)	Indira Gandhi National Old Age Pension Scheme	96,62	10,110.16	Providing social assistance to the poorest of poor segment of the society
	NSAP Programme Indira Gandhi National Widow Pension Scheme	Indira Gandhi National Widow Pension Scheme	3,33,30	33,328	Providing social assistance to the poorest of poor segment of the society
	NSAP Programme Indira Gandhi National Disability Pension Scheme	Indira Gandhi National Disability Pension Scheme	37,93	3,292	Providing social assistance to the disabled segment of the society
	State Social Security Pension Scheme		7,84,78	9,45,20	100% eligible old age people to be covered

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22	Budget Allocation FY 2022-23	Outcomes
Women, Child Development and Social Security Department	Pension Scheme for Primitive Tribal Group		72,00	1,380	Coverage to be increased by 10%
	Rajya Vidhwa Samman Pension Yojna		2,18,40	32,760	Coverage to be increased
		Schemes For Differently Abled Persons	50,95	7,268.87	Increased Accessible infrastructure for Divyangjans
	Welfare Of Disabled		9,50	6,00.00	Support system for PWD

Source: Planning Department, Government of Jharkhand

**Table 25: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 8)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Rural Development Department	National Rural Livelihood Mission	National Rural Livelihood Mission	10,30,00	65,013.72	No. of individuals undertaken micro entrepreneurship as means of livelihood generation Promotion of multiple livelihood opportunities based on agro ecological practices, livestock and non-farm activities to the SHG's members
	Mahatma Gandhi National Rural Guarantee Program	Mahatma Gandhi National Rural Guarantee Program	11,35,47.27	1,30,000	Providing economic security, creating rural assets and empowerment of society disadvantaged groups
	Pradhan Mantri Krishi Sinchayi Yojna – Watershed Development Component	Pradhan Mantri Krishi Sinchayi Yojna – Watershed Development Component	1,00,00	5,000	Higher agriculture yield Increase in productivity of land Coverage of scheme
	Mukhya Mantri Aajeevika Samwardhan Yojna		1,00	100	To improve livelihood of rural native artisans
Urban Development and Housing Department	National Urban Livelihood Mission	National Urban Livelihood Mission	50,00	3,000	Improved livelihoods of urban poor To provide 24X7 all weather shelters to urban homeless Improved access to financial inclusion among urban poor The mobilization of urban poor households to form their own institutions is an important investment for an effective and sustainable poverty reduction programme
	Mukhya Mantri Shramik Yojna – Shahri Rozgar Manjuri for Kamgar		10,00	500	Provide guaranteed wage employment to the adult members of urban households who are willing to do unskilled labour subject to a maximum 100 days per job card in financial year
Labour, Employment, Training and Skill Development Department	Jharkhand Unorganized Worker's Social Security Scheme		NA	NA	NA

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Labour, Employment, Training and Skill Development Department	Skill Development Mission		NA	NA	NA
	Setting Up of Model Career Centres		NA	NA	NA
	Mukhya Mantri Protsahan Yojna		NA	NA	NA
	Mukhya Mantri Yuva Udaan Yojna		NA	NA	NA
	Mukhya Mantri Yuva Samarthya Yojna		NA	NA	NA
	Mukhya Mantri Pratibha Protsahan Yojna		NA	NA	NA
	Extension Of Vocational Training		NA	NA	NA
	Strengthening Of Craftsman / Apprenticeship Training Scheme		NA	NA	NA
	Skill Acquisition and Knowledge Awareness for Livelihood Promotion	Skill Acquisitoin And Knowledge Awarednes For Livelihood Promotion	NA	NA	NA
	Pradhan Mantrai Koushal Vikas Yojana	Pradhan Mantrai Koushal Vikas Yojana	NA	NA	NA
	National Apprenticeship Promotion Scheme	National Apprenticeship Promotion Scheme	NA	NA	NA
	Skill Strengthening for Industrial Value Enhancements	Skill Strengthening for Industrial Value Enhancements	NA	NA	NA
	Upgradation of Government Industrial Training Institute into Model ITIs	Upgradation of Government Industrial Training Institute into Model ITIs	NA	NA	NA

Source: Planning Department, Government of Jharkhand

**Table 31: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 1)**

Department Name	State Scheme Name	Central Scheme Name	Sub Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcome
Agriculture, Animal Husbandry and Co-operative Department (Agriculture Division)	Interest Subvention		Scheme For Interest Subvention	2,00	300	Access to credit
	Loan Waiver Scheme for Farmers		Loan Waiver Scheme for Farmers	12,00,00	91,586	Small and marginal farmers benefiting Reduce crop loan burden of farmers Reduction in NPA Increased Fresh Loan/ Credit Flow to Farmers
	Integrated Poultry Development Scheme		Integrated Poultry Development	6,00	300	Increased egg production Self employment Income generation
	Pig Development/ Goat Development/ Broiler Poultry Development/ Commercial Layer Bird Development/ Low Input Layer Bird Distribution Schemes		Pig Development/ Goat Development/ Broiler Poultry Development/ Commercial Layer Bird Development/ Low Input Layer Bird Distribution Schemes	47,07	4,000	Enhance meat production Increase in farmers income
Forest, Environment and Climate Change Department	Development Of Minor Forest Produce		Development Of Minor Forest Produce	5,00	600	Income generation and livelihood opportunities to the local people
Rural Development Department	Pradhan Mantri Awas Yojna Rural	Pradhan Mantri Awas Yojna (PMAY) – Rural	Pradhan Mantri Awas Yojna – Gramin	37,49,29.40	4,23,234	Providing social security, economic security, creating asset and upgrading living standards
	National Rural Livelihood Mission	National Rural Livelihood Mission	Swarn Jayanti Gram Swarajgar Yojna	10,30,00	65,013.72	No. of individuals undertaken micro entrepreneurship as means of livelihood generation Promotion of multiple livelihood opportunities based on agro ecological practices, livestock and non-farm activities to the SHG's members

Department Name	State Scheme Name	Central Scheme Name	Sub Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcome
Rural Development Department	Mahatma Gandhi National Rural Guarantee Program	Mahatma Gandhi National Rural Guarantee Program	Mahatma Gandhi National Rural Guarantee Program	11,35,47.27	1,30,000	Providing economic security, creating rural assets and empowerment of society disadvantaged groups
	Initiative for Horticulture Intervention on Micro Drip Irrigation		Initiative for Horticulture Intervention on Micro Drip Irrigation	60,00	7,385.82	promotion of livelihood opportunity through MDI to increase additional income
	Pradhan Mantri Adarsh Gram Yojna	Pradhan Mantri Adras Gram Yojana	Pradhan Mantri Adarsh Gram Yojna		2,000	Village level convergence committee (VLCC) has been formed in all the selected PMAGY villages
	Pradhan Mantri Krishi Sinchai Yojna	Pradhan Mantri Krishi Sinchai Yojna	Pradhan Mantri Krishi Sinchai Yojna -Watershed Development Component	1,00,00	5,000	Higher agricultural yield Increase in productivity of land Coverage of scheme
	Lift Irrigation Scheme		Lift Irrigation Scheme	20,00	2,000	Lift irrigation work will be done
	Grant to Watershed Development Programme		Grant To Watershed Development Programme	30,00	2,000	Treatment of watershed (in ha) Conversion of arable land into mono crop (in ha) capacity building of stakeholders (in No.) Income generating activities (no. of family)
	Mukhya Mantri Aajeevika Samvardhan Yojna		Mukhya Mantri Aajeevika Samvardhan Yojna	1,00	100	To improve livelihood of rural native artisans
Women, Child Development and Social Security Department	NSAP Programme Indira Gandhi National Old Age Pension Scheme	Indira Gandhi National Old Age Pension Scheme	Pension Scheme for 60 – 79 Years Age Group	11,37,76	1,13,572.60	Providing social assistance to the poorest of poor segment of the society
	NSAP Programme Indira Gandhi National Old Age Pension Scheme	Indira Gandhi National Old Age Pension Scheme	Pension Scheme for 80 and Above Years Age Group	96,62	10,110.16	Providing social assistance to the poorest of poor segment of the society

Department Name	State Scheme Name	Central Scheme Name	Sub Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcome
Women, Child Development and Social Security Department	NSAP Programme Indira Gandhi National Widow Pension Scheme	Indira Gandhi National Widow Pension Scheme	Pension Scheme for Widows	3,33,30	33,328	Providing social assistance to the poorest of poor segment of the society
	NSAP Programme Indira Gandhi National Disability Pension Scheme	Indira Gandhi National Disability Pension Scheme	Pension Scheme for Disabled Persons	37,93	3,292	Providing social assistance to the disabled segment of the society
	State Social Security Pension Scheme		Mukhya Mantri State Old Age Pension Scheme	7,84,78	9,45,20.00	100% eligible old age people to be covered
	State Pension Scheme for Primitive Tribal Group		Mukhya Mantri State Pension Scheme for Primitive Tribal Group	72,00	1,380	Coverage to be increased by 10%
	State Pension Scheme For HIV/AIDS Affected Persons		Mukhya Mantri State Pension Scheme for HIV/AIDS Affected Persons	5,40	540	Coverage to be increased by 20 %
	Rajya Vidhwa Samman Pension Yojna		Mukhya Mantri Rajya Vidhwa Samman Pension Yojana	2,18,40	32,760	Coverage to be increased

Source: Planning Department, Government of Jharkhand



**Table 33: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 2)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Food, Public Distribution and Consumer Affairs Department	Antyodaya Anna Yojana		1,64,85	16,400.00	Food security of people through distribution of subsidized food grains distributed to the targeted population
	Annapurna Yojana		5,20	1,00.00	Food security of people through distribution of subsidized food grains distributed to the targeted population
	Priority Household Scheme (Under National Food Security Act, 2013)		5,52,71	55,271.00	Food security of people through distribution of subsidized food grains distributed to the targeted population
	Food grains Distribution Scheme for Poor Persons not covered under NFSA		12,25	27,600.00	Food security of people through distribution of subsidized food grains distributed to the targeted population
	Scheme For Distribution of Pulses		NA	49,000.00	To provide protein input of the people through distribution of subsidized pulses distributed to the target population
Women, Child Development and Social Security Department	SNP for Pregnant – Lactating Women, and Children	Saksham Anganwadi and Poshan2.0	9,07,14	89,097.79	Enhancing capability of families to look after health & nutrition of Child, Pregnant Women, Lactating Mother
	Poshan Abhiyan Scheme	Saksham Anganwadi and Poshan 2.0	87,90	8,834.00	Strengthened ICDS policy framework, systems and capacities, and improved community engagement, for greater focus on children under three years of age, Lactating Mother and Pregnant women

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Agriculture, Animal Husbandry and Co-operative Department (Agriculture Division)	National Horticulture Mission	National Mission on Horticulture	1,00,00	10,597	Increased acreage of horticulture crops High production & productivity of horticulture crops
	National Mission on Agriculture Extension And Technology	Sub – Mission on Agriculture Extension	61,00	9,819	Increased farmers' training and extension support Enhancement in technology adoption through capacity building of agriculture extension functionaries
	National Mission for Sustainable Agriculture	Rainfed Area Development and Climate Change	10,00	1,413	Increase in productivity
	National Food Security Mission	National Food Security Mission	1,41,00	8,644	Self-sufficiency in food grains production
	Rashtriya Krishi Vikas Yojna	Rashtriya Krishi Vikas Yojna	1,25,00	22,033	Making farming a remunerative economic activity through strengthening the farmers' effort risk mitigation and promoting agri entrepreneurship
	Pradhan Mantri Krishi Sinchayee Yojana	Pradhan Mantri Krishi Sinchayee Yojana	1,93,70	25067	Crop diversification under micro irrigation
	Sub Mission on Agricultural Mechanisation	Sub- Mission on Agriculture Mechanisation	5,00	3608	Increased reach of farm mechanization among target beneficiaries
	Paramparagat Krishi Vikas Yojana	Paramparagat Krishi Vikas Yojana	64,50	3723	Expansion in area under organic cultivation
	National Project on Management of Soil Health and Fertility	National Project on Management of Soil Health and Fertility	15,00	5369	Maintenance of soil fertility
	Integrated Birsa Village Development Scheme		61,00	9,000	Farmers enrolled in Krishak Pathshala Increased Farmers income Increase in marketing potential and price realization Increase in productivity

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Agriculture, Animal Husbandry and Co-operative Department (Fishery Division)	Birsa Seed Production, Exchange, Distribution and Crop Diversification Scheme		NA	6,000	Self-sufficiency in food grains production
	State Horticulture Development Scheme		1,50,00	14,700	Increased acreage of horticulture crops High production & productivity of horticulture crops
	Soil And Water Conservation Scheme		NA	47,000	Enhancement of irrigation facility Drought proofing of agriculture
	National Food Security Mission (Oilseeds)	National Food Security Mission (Oilseeds)	1,41,00	500	Self-sufficiency in oilseeds production
	Sub-Mission on Seed and Planting Material	Sub- Mission on Seed and Planting Material	NA	5,00.00	Self-sufficiency in food grains production
	Reclamation And Development of Tank and Reservoir Fisheries		37,00	4,000	Enhanced fish and fish seed production
	Cage Culture Extension and Strengthening Scheme		6,00	800	Enhance fish production
	Integrated Fish Culture Scheme		2,00	100	Reduce cost of fish production
	Pradhan Mantri Matsya Sampada Yojana	Pradhan Mantri Matsya Sampada Yojana	64,80	5,100	EMPLOYMENT GENERATION Increased risk coverage of life

Source: Planning Department, Government of Jharkhand

**Table 35: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 4)**

DEPARTMENT NAME	STATE SCHEME NAME	CENTRAL SCHEME NAME	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
School Education and Literacy Department	Mukhyamantri Merit Scholarship		1,100	1,200	Promoting competitiveness among students
	Free Cycle Distribution		600	600	Enhancing access retention transition
	Mukhyamantri Special Scholarship Scheme		1000	1000	Enhancing access retention transition and reducing dropout rate
	Model School Hostel		NA	11,500	Enhancing access retention transition
	Kasturba Gandhi Balika Vidyalaya Hostel		NA	20,000	Enhancing access retention transition and reducing dropout rate
	Adarsh Vidyalaya Scheme		4,50,00	30,000	Enhancing access retention transition and reducing dropout rate Enhancing learning outcomes of students
	Strengthening of Infrastructure and Facilities in Secondary and Senior Secondary Schools		40,00	15,500	Enhancing access, retention, transition
	Free Distribution of School Uniform Text Book and Copy to Students		NA	12,000	Enhancing access retention transition and reducing dropout rate Enhancing learning outcomes of students
	Free Distribution of Textbooks		NA	1078	Enhancing learning outcomes of students

DEPARTMENT NAME	STATE SCHEME NAME	CENTRAL SCHEME NAME	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
School Education and Literacy Department	Sarva Siksha Abhiyan	Samagra Shiksha	28,01,54.54	1,93,300	Enhancing access, retention, transition and reducing drop-out Enhancing learning outcome of students Improving overall quality of teachers Promoting vocationalisation of education Bridging social gender gap in school education by providing special emphasis on girls and ensuring equitable and inclusive education at all levels for children belonging to SC/ST/Minorities and CWSN-less dropout
	Nutritional Support to Primary Education	National Programme of Mid-Day Meal in Schools	8,95,84.75	65,483	To improve attendance Reduction in gender/social gap in education Preparing meals in all the eligible schools Improvement in nutrition levels of children
	Jharkhand Balika Awasiya Yojana		66,12.80	3,000	Bridging social and gender gaps in school education by providing special emphasis on girls
	Free Distribution of School Kit to Children		1,00,00	5,600	Enhancing access
	Gyanoday Yojna (Including Training to Education Officers/ Teachers, Teacher Award and Symposium)		1,00,00	10,000	To improve attendance

DEPARTMENT NAME	STATE SCHEME NAME	CENTRAL SCHEME NAME	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
School Education and Literacy Department	Chief Minister Special Scholarship Scheme		10,00	1,000	To reduce dropout rate
	Kasturba Gandhi Balika Vidyalaya Strengthening and Capacity Enhancement		30,00	3,800.07	Bridging social gender gap in school education
	Free Distribution of Uniform for Students of Class 1 To 8		NA	2,500	Enhancement in retention rate
	Strengthening Of PTTC/Diet		NA	1,500	Overall improvement of quality of teaching
	Elementary School Infrastructure, Maintenance and Upgradation		NA	5,000	Improvement of student attendance
	Supplementary Nutrition (Egg/Fruit)		NA	13,600	Improvement in nutrition levels of children
Higher and Technical Education Department	Rashtriya Uchchatar Shiksha Abhiyan	Rashtriya Uchhatar Shiksha Abhiyan	88,00	8,500	Increase in ulfilnt of students in technical institutes Increase in ulfilnt of female SC,ST students in technical institutes Increase number of employment Increase in number of students passing out with more than 75% at UG and PG level increase in number of enrolment at PG level Increase in employability Increase in research and innovation

DEPARTMENT NAME	STATE SCHEME NAME	CENTRAL SCHEME NAME	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Higher and Technical Education Department	Mukhyamantri Fellowship Schemes		5,00	500	Percentage increase in number of research work presented in 100 top universities Percentage increase in number of students enrolled and pass outs in technical and professional courses Increase in number of employment receiving technical/ professional courses and PhD Percentage increase in number PhD Percentage decrease in dropout
	Grant In Aid to Universities and Existing College for Infrastructure Development		95,00	4,000	Access, equity and quality enhancement
	Grant-In-Aid to Universities for Library, Laboratory, Computer Centers, Entrepreneurship Development Centre & ICT Infrastructure		40,00	6,000	Quality enhancement improved teaching-learning methods
	Grant-In-Aid to University for Free Education to Girls, Distance Learning, Establishment of Coaching Centre and Conducting Classes in Two Shifts		7,00	700	Percentage increase in access and equity. Percentage increase in employability. Percentage decrease in dropout.
	Grant-In-Aid for Infrastructure Development of New Colleges and Universities		1,10,00	19,498.88	Quality enhancement of existing facilities in universities and colleges Increase in enrolment Increase in enrolment of female, SC,ST students

DEPARTMENT NAME	STATE SCHEME NAME	CENTRAL SCHEME NAME	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Higher and Technical Education Department	Assistance to Universities NAAC Accreditation, Research and Incubation Centre		NA	2,000	Access, equity and quality enhancement of higher education
		Rashtriya Uchhatar Shiksha Abhiyan Construction of Polytechnic Institutions and Development of Infrastructure in Various Districts with the Help of Central Government.	51,60	8,500	Increase in enrolment of students in technical institutes Increase in enrolment of female, SC, ST students in technical institutes Increase in number of employments Increase in ulfilnt Increase in number of students passing out with more than 75% at UG and PG level increase in number of enrolments at PG level Increase in employability Increase in research and innovation
	Construction – Renovation of Government Engineering College, Polytechnics, Technical Education Hub and Other Infrastructure		1,00,00	9,000	Enrolment capacity and employment generation will increase due to new construction work and rejuvenation of old institutions
	Jharkhand University of Technology		10,00	1,000	Aware of certificates Pass out Employments Results Provide services as consultant to different organisation
	Cash Relief to Girls Students for Technical Education		10,00	1,000	To promote technical education for girls



DEPARTMENT NAME	STATE SCHEME NAME	CENTRAL SCHEME NAME	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Higher and Technical Education Department	Grant-In-Aid to Central Government Aided Technical/ Professional Institutes		37,50	500	With the construction and operation of a national level institute in the capital region employment will be generated directly and indirectly
Women, Child Development and Social Security Department	Pre-School Kits	Saksham Anganwadi and Poshan2.0 (Umbrella ICDS – Anganwadi Services Poshan Abhiyan)	20,00	8,834.00	Strengthened ICDS policy framework, systems and capacities, and improved community engagement, for greater focus on children under three years of age, Lactating Mother and Pregnant women
	Pradhanmantri Matru Vandana Yojana	Samarthya	49,00	4,917	Improved health seeking behaviour amongst the pregnant women and lactating mothers
	Mukhyamantri Sukanya Yojana		1,29,70	11,479	Women empowerment, ensuring education of girl child, discouraging child marriage
	Scheme for Supply of Uniform to AWC Going Children		NA	4,532	Supporting to fulfil basic needs of early age children like nutrition, education, clothes.

Source: Planning Department, Government of Jharkhand

**Table 37: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 9)**

Department	State Scheme	Centre Scheme	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Industries	Small Industries Cluster Development Programme (Sicdp)		NA	NA	NA
	Skill Development-Industry		NA	NA	NA
	Handloom Development		NA	NA	NA
	District Industries Centre		NA	NA	NA
	Sericulture Development		NA	NA	NA
	Development Of Handicrafts		NA	NA	NA
	Khadi Gramodyog Board		NA	NA	NA
	Study, Visit – Training		NA	NA	NA
	Capital Subsidy Against Actual Payment Of Sale Tax/Vat		NA	NA	NA
	Incentives (Under Jip 2012		NA	NA	NA
	Net Vat (Under Jip 2012)		NA	NA	NA
	Industrial Areas Development Authority		NA	NA	NA
	Establishment Of Tool Room		NA	NA	NA
	Incentives Under Jip 2001		NA	NA	NA
	Outstanding Performance Awards		NA	NA	NA
	Jharkhand Food Processing Industry Policy-2015		NA	NA	NA
	Jharkhand Feed Processing Industry Policy-2015		NA	NA	NA
	Jharkhand Export Policy-2015		NA	NA	NA
	Industrial And Investment Promotion Policy-2016		NA	NA	NA
	Building and Construction	Incentive Under Jharkhand Textile, Apparel And Footwear Policy-2016		NA	NA
Jharkhand Automobile & Auto component Policy-2016			NA	NA	NA
Startup Capital Venture Fund (1626)			NA	NA	NA
Creation Of Infrastructure Facility For Displaced By Industrial Project (1751)			NA	NA	NA
Repair And Maintenance Including Outsourcing Etc. (1579)			NA	NA	NA
Construction Of Office Buildings/Circuit Houses			NA	NA	NA
Court Buildings			NA	NA	NA
Training		NA	NA	NA	
Construction Of Government Residential Buildings		NA	NA	NA	
Construction Of Subordinate Judicial Buildings	Infrastructure Facilities for Judiciary		NA	NA	NA

Department	State Scheme	Centre Scheme	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Information and Technology	It Publicity		NA	NA	NA
	It Dept. Establishment		NA	NA	NA
	Grant To Jsac		NA	NA	NA
	Grant To Jap-It (Establishment of Govt. Officials)		NA	NA	NA
	Software Technology Park of India Centres (Jamshedpur, Dhanbad, Bokaro, Deoghar Etc.)		NA	NA	NA
	Skill Development (Programme For Youth )		NA	NA	NA
	Maintenance Of Data Centre, Lan – Portal		NA	NA	NA
	E-governance Computerization of Govt. Depts		NA	NA	NA
	Project Of GIS and Remote Sensing		NA	NA	NA
	E-Procurement		NA	NA	NA
	E-Office		NA	NA	NA
	State E-Governance Projects		NA	NA	NA
	Workshop/Seminar/Conference Etc		NA	NA	NA
	Promotion Of It/ITES Based Industries & Related Policies		NA	NA	NA
	Establishment Of IT Park		NA	NA	NA
	Software Technology Park of India Centers (Jamshedpur, Dhanbad, Bokaro, Deoghar Etc.) (Capital)		NA	NA	NA
	Construction Of Jsac Building		NA	NA	NA
Road Construction	Roads		NA	NA	NA
	Bridges		NA	NA	NA
	Annuity Payment Of Bot (Annuity) Project		NA	NA	NA
	Machines – Tools		NA	NA	NA
	Widening And Strengthening To 2 Lanes for Roads Around 310 Kms Of Govindpur-Jamtara-Dumka-Sahebganj Road and Project Under ADB-II		NA	NA	NA
	-	Schemes Of States Financed from Central Road Investment Fund (Crf)	NA	NA	NA

Department	State Scheme	Centre Scheme	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Transport	Regional Connectivity Scheme (Rcs) And Development of Airports		NA	NA	NA
	CPL, Gliding and Aero Modelling Training		NA	NA	NA
	Fund Allocation for Construction of State Air Base At Ranchi Airport		NA	NA	NA
	Construction And Expansion of Runway for Different District Headquarters		NA	NA	NA
	Land Acquisition for Extension of Airports		NA	NA	NA
	Expansion And Development of Deoghar Airport		NA	NA	NA
	Regional Connectivity Scheme (Rcs) And Development of Airports		NA	NA	NA
	Construction of Helipads in Jharkhand		NA	NA	NA
	Procurement/Lease of Jet Engine Vip Aircraft/Helicopter		NA	NA	NA
	Cpl, Gliding and Aeromodelling Training		NA	NA	NA
	Establishment of Jharkhand State Road Transport Corporation		NA	NA	NA
	Railway Projects (Continuing)		NA	NA	NA
	Godda-Hansdiha Rail Link		NA	NA	NA
	Pirpainti-Jasidih New Railway Link		NA	NA	NA
		State Share Capital of Joint Venture Company		NA	NA
Grants In Aid for Joint Venture Company			NA	NA	NA
Building Construction and Repair			NA	NA	NA
Purchase of Vehicles			NA	NA	NA
Establishment of Motor Vehicle Driving Training Institute (New Scheme)			NA	NA	NA
Printing Of Forms / Challans / Token			NA	NA	NA
Project Monitoring Unit (PMU) (Transport)			NA	NA	NA
Road Safety Fund			NA	NA	NA
State Share for Establishment Of Inspection & Certification Centre			NA	NA	NA
Construction For Traffic Park			NA	NA	NA
Implementation of Electric Vehicle Policy			NA	NA	NA
Creation of Automated Driving Testing Track			NA	NA	NA
Initial Share in Special Purpose Vehicle (Spv) For Railway Project			NA	NA	NA
Mining and Geology	Geological Exploration		NA	NA	NA
	Directorate Of Mines		NA	NA	NA
	Maintain And Strengthen the Jimms and Prevention of Illegal Mining, Transportation and Storage		NA	NA	NA
	Directorate of Mines		NA	NA	NA

Department	State Scheme	Centre Scheme	Budget allocation FY 2021-22 (in lakhs)	Budget allocation FY 2022-23 (in lakhs)	Outcomes
Tourism	Strengthening, Maintenance, Running Etc. of Tourist Information Centre		NA	NA	NA
	Financial Assistance to Jharkhand Tourism Development Corporation for Management, Cleanliness, Creation, Up Gradation, Publicity Etc. Of Tourism Facilities and Providing Tour Facility to Poor Family Of The State In The Tour Package Form For Visiting Tourist/ Religious Places Inside The State & Outside The State (Within India)		NA	NA	NA
	Incentives Under State Tourism Policy		NA	NA	NA
	Training, Skill Development & Exposure Visit Etc.		NA	NA	NA
	Computerization, Modernization & E-Solution		NA	NA	NA
	Financial Asst. To Jtdc Via Director, Tourism for Management, Creation, Renovation Etc		NA	NA	NA
	Tourism Publicity		NA	NA	NA
	Consultancy, Security and Other Services		NA	NA	NA
	Grants-In-Aid To Institute of Hotel Management, Food Craft Institute, Jharkhand Adventure Tourism Institute, Various Tourism Development Authority, Baba Baidynath Dham-Basukinath Shrine Area Development Authority Etc.		NA	NA	NA
	Providing Tour Facility to Poor Family of The State In The Tour Package Form for Visiting Tourist/ Religious Places Inside The State & Outside The State (Within India)		NA	NA	NA
	Maintenance, Management and Cleanliness Etc of Tourist Spots		NA	NA	NA
	Grant In Aid Subsidy for Kailash Mansarovar Yatra		NA	NA	NA
	Grants-In-Aid Support to Dtpc for Development of Tourist Places and Tourism Improvement		NA	NA	NA
	Grants-In-Aid to Forest Development Authority for Eco-Tourism Development in Forest and Wildlife Area		NA	NA	NA
	Fair/Festival/ Exhibition/ Publicity/ Dissemination/ Seminar And Eco-Retreat Etc (Tourism Publicity)		NA	NA	NA
	Integrated Development of Various Tourism Circuit		NA	NA	NA
	Promotion of Rural Heritage & Home Stay		NA	NA	NA
	Development of Tourist Amenities		NA	NA	NA
	Integrated Development of Various Tourist Places		NA	NA	NA

**Table 40: Mapping of Central and State Government Schemes and Projects by Concerned Line Departments (SDG 13)**

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Forest, Environment And Climate Change Department	Silvicultural Operations	Na	30,90.73	3,600	Increase in the quality of and quantity of forest cover. Increase in the CO2 absorption thereby reducing climate change. Increase in Bio-diversity of flora and fauna. Creation of man-dal people.
	Palamau Tiger Reserve	Project Tiger	7,50	500	Increase in Biodiversity and carbon sequestration ys for the local people. Increase in soil and water conservation. Increase in the livelihood opportunities for locaby natural forests.
	Mukhyamantri Jan-Van Yojna		10,00	1,000	Increase in the quality and quantity of forest cover. Increase in the CO2 absorption thereby reducing climate change. Increase in Biodiversity of flora and fauna. Creation of man-days for the local people. Increase in soil and water conservation. Increase in the livelihood opportunities for local people

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Forest, Environment And Climate Change Department	Afforestation & Soil Conservation On Notified Forest Land		90,00	11,320	Increase in the quality and quantity of forest cover. Increase in the CO2 absorption thereby reducing climate change. Increase in Biodiversity of flora and fauna. Creation of man-days for the local people. Increase in soil and water conservation. Increase in the livelihood opportunities for local people
	Afforestation On Land Outside Notified Forest		27,00	3,500	Increase in the quality and quantity of forest cover. Increase in the CO2 absorption thereby reducing climate change. Increase in Biodiversity of flora and fauna. Creation of man-days for the local people. Increase in soil and water conservation. Increase in the livelihood opportunities for local people
	Palamau Tiger Reserve (Non-Recurring)	Project Tiger	7,50	500	Increase in Biodiversity and carbon sequestration by natural forests.
	Sub-Mission on Agroforestry (Smaf)	9142 – National Mission on Sustainable Agriculture	5,50	500	Hi-tech nurseries producing better quality seedlings for the ulfilc and forest department. Increase in agroforestry initiatives of the people towards higher income

Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Forest, Environment And Climate Change Department	Forest Fire Prevention and Management	Forest Fire Prevention and Management Scheme	7,00	400	Fire tracing along the roads and maintenance of existing fire lines, purchasing of firefighting equipment etc.
	Compensatory Afforestation		1,10,74.23	10,533.74	Preparation work for plantation of ulfil 41.94 lakh saplings, preparation work for silviculture operation. Conservation of flora and soil moisture conservation structure.
	Catchment Area Treatment Plan		5,68.56	1,515	Soil moisture and plantation work in 15000 ha. Gully plugging, silt detention dam, check-dam, contour trenches will be constructed in 15000 ha.
	Net Present Value of Forest Land		82,17.83	12,201.26	Preparation work for plantation of ulfil 41.10 lakh. Sapling preparation work for block plantation 3700 ha, Silviculture operation in 2050 ha.
	Interest		2,50	200	Protection, restoration and sustainable use of ecosystems, sustainable management of forests. The study will help in forest management.



Department Name	State Scheme Name	Central Scheme Name	Budget Allocation FY 2021-22 (in lakhs)	Budget Allocation FY 2022-23 (in lakhs)	Outcomes
Forest, Environment And Climate Change Department	Others		10	50	Protection, restoration and sustainable use of ecosystems, sustainable management of forests. The study will help in forest management.
	Urban Forestry Yojana		20,00	3,000	As per IFSR report 2021, the forest cover in the state is 23721 sqkm which shows a total gain of 11000 ha. Of forest cover from 2019 to 2021
	Riverside Plantation Yojana		10,50	1,500	As per IFSR report 2021, the forest cover in the state is 23721 sqkm which shows a total gain of 11000 ha. Of forest cover from 2019 to 2021

Source: Planning Department, Government of Jharkhand

## Appendix - II

Status of SDG Indicators INDIA Index & Dashboard 2020-21						
State: Jharkhand						
Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
<b>SDG 1: No Poverty</b>						
Population below poverty line (%)	36.96	36.96	Tendulkar Committee Report	2011-12	36.96	Tendulkar Committee Report - 2011-12
MPI Head count ratio (%)	46.5		Global MPI Country Briefing 2020: India - OPHI, NFHS-4	2015-16	42.16	National Multidimensional Poverty Index Baseline Report-2021, NITI Aayog
Households covered by health scheme/ insurance (%)	13.3	13.3	Ministry of Health & Family Welfare, [National Family Health Survey-4]	2015-16	50.3	NFHS - 5
MGNREGA - Employment provided against demanded (%)	80.62	75.38	Ministry of Rural Development, [MGNREGA Progress Report]	2019-20	82.45	Ministry of Rural Development, [MGNREGA Progress Report] - 2021-22
Beneficiaries under PMMVY (%)	89.69		Ministry of Women and Child Development	2019-20	89.69	Ministry of Women and Child Development - 2019-20
Households living in katcha houses (%)	6.6	6.6	[National Sample Survey - 76th round - Drinking Water, Sanitation, Hygiene and Housing Condition in India] pg 153	July 2018 to December 2018	6.6	[National Sample Survey - 76th round - Drinking Water, Sanitation, Hygiene and Housing Condition in India] pg 153 - July 2018 to December 2018
<b>SDG 2: Zero Hunger</b>						
Beneficiaries under NFSA (%)	99.8	77.8	Department of Food & PD, MoA&FW [ Sourced from MoSPI NIF PR 2020 V2.1]	2019-20	99.8	Department of Food & PD, MoA&FW [ Sourced from MoSPI NIF PR 2020 V2.1] - 2019-20
Children under 5 years who are underweight (%)	42.9	42.9	MoH&FW, Comprehensive National Nutrition Survey	2016-18	39.4	NFHS - 5
Children under 5 years who are stunted (%)	36.2	36.2	MoH&FW, Comprehensive National Nutrition Survey	2016-18	39.6	NFHS - 5
Pregnant women (15-49 years) who are anaemic (%)	62.6	62.6	MoH&FW, NFHS-4	2015-16	56.8	NFHS - 5
Adolescents (10-19 years) who are anaemic (%)	34		MoH&FW, Comprehensive National Nutrition Survey	2016-18	34	MoH&FW, Comprehensive National Nutrition Survey - 2016-18
Rice and wheat produced annually (Kg/ Ha) (2019 - rice,wheat and coarse cereals)	1890.35	2057.33	Directorate of Economics and Statistics, MoAFW	2018-19	1890.35	Directorate of Economics and Statistics, MoAFW - 2018-19

Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
GVA (constant prices) in agriculture (in Lakhs/worker)	0.31	0.31	MoSPI GSVA / NSVA database and Agricultural Statistics at a Glance 2019, MoA&FW	2018-19	0.31	MoSPI GSVA / NSVA database and Agricultural Statistics at a Glance 2019, MoA&FW - 2018-19
<b>SDG 3: Good Health and Well-being</b>						
Maternal Mortality Ratio (per 1,00,000 live births)	71	76	SRS 2016-18	2016-18	71	SRS 2016-18 - 2016-18
Under 5 mortality rate (per 1,000 live births)	34	54	SRS 2016-18	2016-18	45.4	NFHS - 5
Children (9-11 months) fully immunized (%)	94		Dashboard(HMIS)-Routine Immunization Program	Apr 19-March 20	79.2	NFHS - 5
Notification rate of Tuberculosis per 1,00,000 population	146	127	National TB Elimination Programme, MoHFW	2019	115	India TB report 2021
HIV incidence per 1,000 uninfected population	0.04	0.07	India HIV Estimations Report 2019, NACO, ICMR	2019	0.04	India HIV Estimations Report 2019, NACO, ICMR
Suicide rate (per 1,00,000 population)	4.4		Accidental Deaths and Suicides in India, NCRB	2019	5.6	Accidental Deaths and Suicides in India, NCRB - 2020
Death rate due to road accidents per 1,00,000 population	10.11		Accidental Deaths and Suicides in India, NCRB	2019	18.1	Accidental Deaths and Suicides in India, NCRB - 2020
Institutional deliveries out of the total deliveries reported (%)	95.8	63.8	HMIS	Apr-Dec 2019	75.8	NFHS - 5
Monthly per capita out-of-pocket expenditure on health (%)	11		Longitudinal Aging Study in India 2020, National Programme for Healthcare of Elderly and IIPS, MoHFW	2017-18	11	Longitudinal Aging Study in India 2020, National Programme for Healthcare of Elderly and IIPS, MoHFW - 2017-18
Physicians, nurses and midwives per 10,000 population	4	4	National Health Profile 2019, MCI+CBHI, Directorate General of Health Services	2016-17	4	National Health Profile 2019, MCI+CBHI, Directorate General of Health Services - 2016-17
ANER in elementary education (class 1-8)	89.15	89.68	UDISE+, MoE	2018-19	92.17	UDISE+, MoE - 2019-20
Average annual dropout rate at secondary level (class 9-10)	22.26	36.64	UDISE+, MoE	2018-19	16.6	UDISE+, MoE - 2019-20
GER in higher secondary (class 11-12)	38.89		UDISE+, MoE	2018-19	40.8	UDISE+, MoE - 2019-20
Class 8 students achieving minimum proficiency level in language and maths (%)	84	84	Department of School Education. Sourced from MoSPI NIF Progress Report 2020 V2.1	2017-18	84	Department of School Education. Sourced from MoSPI NIF Progress Report 2020 V2.1 - 2017-18
GER in higher education (18-23 years)	19.1	19.1	AISHE 2018-19, Department of Higher Education	2018-19	20.9	AISHE 2019-20, Department of Higher Education

Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
Persons with disability (>15 years) having completed secondary education (%)	16.9		NSS Report No. 583: Persons with Disabilities in India	Jul-Dec 2018	16.9	NSS Report No. 583: Persons with Disabilities in India - Jul-Dec 2018
GPI for higher education (18-23 years)	0.96	0.96	AISHE 2018-19, Department of Higher Education	2018-19	1	AISHE 2019-20, Department of Higher Education
Persons (>15 years) who are literate (%)	67.3		PLFS 2018-19	2018-19	67.5	PLFS 2019-20
Schools with access to electricity, drinking water (%)	84.75		MoE	2018-19	98.34	UDISE+,MoE - 2019-20
Trained teachers at secondary level (class 9-10)	80.12		MoE	2018-19	80.12	MoE - 2018-19
Pupil Teacher Ratio at secondary level (class 9-10)	51		UDISE+,MoE	2018-19	33.7	UDISE+,MoE - 2019-20
<b>SDG 5: Gender Equality</b>						
Crimes against women per 1,00,000 female population	47.8	35.6	MHA, NCRB, Crime in India 2019	2019	41	MHA, NCRB, Crime in India 2020
Sex ratio at birth	923	916	SRS Statistical Report 2018	2016-18	899	NFHS - 5
Average wage/salary received (Female to male)	0.58	0.5	MoSPI, PLFS 2018-19	July 2018-June 2019	0.58	MoSPI, PLFS 2018-19 - July 2018-June 2019
Cruelty/physical violence by husband/his relatives (per 1,00,000 women)	8.18		MHA, NCRB, Crime in India 2019	2019	7.8	MHA, NCRB, Crime in India 2020
Elected women in state legislative assembly (%)	12.35	10.39	Election Commission of India	2019	12.35	Election Commission of India - 2019
Female to male LFPR (15-59 years)	0.28		MoSPI, PLFS 2018-19	2018-19	0.28	MoSPI, PLFS 2018-19 - 2018-19
Women in managerial positions in listed companies (per 1,000 persons)	229		Ministry of Corporate Affairs (Sourced from MoSPI NIF Progress Report 2020)	2018-19	229	Ministry of Corporate Affairs (Sourced from MoSPI NIF Progress Report 2020) - 2018-19
Demand for family planning satisfied by modern methods (15-49 years)	63.8		NFHS-4	2015-16	63.8	NFHS-4 - 2015-16
Operational land holding gender wise (%)	11.27	11.27	Ministry of Agriculture and Farmers Welfare [Agriculture Census - 2015-16]	2015-16	11.27	Ministry of Agriculture and Farmers Welfare [Agriculture Census - 2015-16] - 2015-16
<b>SDG 6: Clean Water and Sanitation</b>						
Rural population getting drinking water within premises through PWS (%)	35.49		Department of Drinking Water and Sanitation,MoJS	As on 20.01.2021	45.9	Department of Drinking Water and Sanitation,MoJS_JJM IMIS - as on 29.12.2021

Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
Rural population having improved source of drinking water (%)	99.71	88	Department of Drinking Water and Sanitation,MoJS	As on 20.01.2021	99.86	Department of Drinking Water and Sanitation,MoJS_JJM IMIS - as on 29.12.2021
SBM(G) - Individual household toilets constructed against target (%)	100	100	SBM(G)	2020	100	SBM (G) - MIS as on 29.12.2021
SBM(G) - Districts verified to be ODF (%)	100	83.33	SBM(G)	2020	100	SBM (G) - MIS as on 29.12.2021
Schools with separate toilet facility for girls (%)	98.33	98.17	MoE	2018-19	99.05	UDISE+,MoE - 2019-20
Industries complying with CPCB waste water treatment norms (%)	79.15	51.66	CPCB,MoEFCC	2019	79.15	CPCB,MoEFCC - 2019
Ground water withdrawal against availability (%)	27.77	27.77	Central Ground Water Board	2017	27.77	Central Ground Water Board - 2017
Blocks/mandals/taluka over-exploited (%)	1.15	1.15	Central Ground Water Board	2017	1.15	Central Ground Water Board - 2017
<b>SDG 7: Affordable and Clean Energy</b>						
Households electrified (%)	100	100	Ministry of Power (Saubhagya Dashboard)	2019	100	Ministry of Power (Saubhagya Dashboard) - 2021
LPG+PNG connections against number of households(%)	75.79		MoPNG Calculations	As on 31.07.2020	75.79	MoPNG Calculations - As on 31.07.2020
<b>SDG 8: Decent Work and Economic Growth</b>						
Annual growth rate of GDP (constant prices) per capita	5.3		MoSPI GSVA / NSVA database	2018-19	6.7	Economic Survey 2021-22 (Data is based on 2019-20)
EODB   2020 Feedback score   2019 Implementation score	29.54	98.05	DPIIT, MoCI	2019	29.54	DPIIT, MoCI
Unemployment rate (%)   2020 (15-59 years)   2019 (15+ years)	5.5	7.5	MoSPI,PLFS	2018-19	4.6	PLFS 2019-20
LFPR (%)   2020 (15-59 years)   2019 (15+ years)	50.5	45.1	MoSPI,PLFS	2018-19	55.9	PLFS 2019-20
Regular wage/salaried employees in non-agriculture sector without social security benefits (%)	60.5		MoSPI,PLFS	2018-19	68.4	PLFS 2019-20
Households covered with a bank account against target (PMJDY)	100	100	MoF, PMJDY - Statewise House Hold Report	2020	100	MoF, PMJDY - Statewise House Hold Report - 2021
Functioning branches of commercial banks per 1,00,000 population	8.59	10.51	RBI	as in September 2020	8.59	RBI - as in September 2020
ATMs per 1,00,000 population	9.55		RBI	as in September 2020	9.55	RBI - as in September 2020

Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
Women account holders in PMJDY (%)	55.74	53.76	MoF, DFS	30/12/2020	55.74	MoF, DFS - 30/12/2020
SDG 9: Industry, Innovation, and Infrastructure						
PMGSY - Habitations connected 2020 - Cumulative progress 2019 - FY 2018-19 progress	99.86	101.41	PMGSY, Ministry of Rural Development	Cumulative Progress till 2020	99.86	PMGSY, Ministry of Rural Development - Cumulative Progress till 2020
GVA in manufacturing to total GVA (current prices) (%)	20.02		MoSPI GSVA / NSVA database	2018-19	21.34	Economic Survey 2021-22 (Data is based on MoSPI 2019-20)
Manufacturing employment as a percentage of total employment	7.68	8.69	PLFS 2018-19	2018-19	7.68	PLFS 2018-19 - 2018-19
Innovation score as per the India Innovation Index	17.12		India Innovation Index	2020	17.12	India Innovation Index - 2020
Score as per LEADS report	2.88		LEADS Report 2019	2019	2.88	LEADS Report 2019 - 2019
Mobile connections per 100 persons	57.55	Null	Dept.of Telecommunications	As on 30.06.2020	57.55	Dept.of Telecommunications - As on 30.06.2020
Internet subscribers per 100 population	30.99	Null	Dept.of Telecommunications	As on 30.06.2020	30.99	Dept.of Telecommunications - As on 30.06.2020
SDG 10: Reduced Inequalities						
Population in the lowest two wealth quintiles (%)	68		NFHS-4	2015-16	68	NFHS-4 - 2015-16
Elected women in the State/UT (%) (Lok Sabha elections)	14.29		ECI	2019	14.29	ECI - 2019
Seats held by women in PRIs (%)	51.57	59.18	MoPR	2020	51.57	MoPR - 2020
SC/ST seats in State Legislative Assembly (%)	45.68	45.68	ECI	2019	45.68	ECI - 2019
LFPR - Transgender to male	0.86	0.86	5th Employment-Unemployment Survey, Labour Bureau, Ministry of Labour and Employment	2016	0.86	5th Employment-Unemployment Survey, Labour Bureau, Ministry of Labour and Employment - 2016
Crimes against SCs (per 1,00,000 SC population)	16.3		NCRB 2019, MHA	2019	16.7	MHA, NCRB, Crime in India 2020
Crimes against STs (per 1,00,000 ST population)	4		NCRB 2019, MHA	2019	4	MHA, NCRB, Crime in India 2020
SDG 11: Sustainable Cities and Communities						

Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
Urban households living in katcha houses (%)	0.8		MoSPI, NSS 76th Round, Drinking Water, Sanitation, Hygiene and Housing Conditions in India	July 2018 to December 2018	0.8	MoSPI, NSS 76th Round, Drinking Water, Sanitation, Hygiene and Housing Conditions in India - July 2018 to December 2018
Deaths due to road accidents in urban areas per 1,00,000 population	18.36		Accidental Deaths and Suicides in India, NCRB, MHA	2019	18.36	Accidental Deaths and Suicides in India, NCRB, MHA - 2019
SBM(U) - wards with 100% door to door waste collection (%)	96.24	97.75	SBM-U, MoHUA	November 2020	96.24	SBM-U, MoHUA - November 2020
SBM(U) - Individual household toilets constructed against target (%)	135	134.59	SBM-U, MoHUA	2020	135	SBM-U, MoHUA - 2020
SBM(U) - MSW processed to total MSW generated (%)	63.98	56	SBM-U, MoHUA	November 2020	63.98	SBM-U, MoHUA - November 2020
SBM(U) - wards with 100% source segregation (%)	85.62	78.36	SBM-U, MoHUA	November 2020	85.62	SBM-U, MoHUA - November 2020
Installed sewage treatment capacity to sewage generated (%)	13.01	9	CPCB, MoEFCC	2018	13.01	CPCB, MoEFCC - 2018
Urban households with drainage facility (%)	75.1		MoSPI, NSS 76th Round, Drinking Water, Sanitation, Hygiene and Housing Conditions in India	July 2018 to December 2018	75.1	MoSPI, NSS 76th Round, Drinking Water, Sanitation, Hygiene and Housing Conditions in India - July 2018 to December 2018
SDG 12: Responsible Consumption and Production						
Per capita fossil fuel consumption (in kg.)	103.4		MoPNG (Sourced from MoSPI NIF PR 2020)	2018-19	103.4	MoPNG (Sourced from MoSPI NIF PR 2020) - 2018-19
Usage of nitrogenous fertilizer out of total N,P,K (%)	70.08	76.89	Agricultural Statistics at a Glance 2019, MoA&FW	2018-19	70.08	Agricultural Statistics at a Glance 2019, MoA&FW - 2018-19
Hazardous waste generated per 1,000 population (Tonnes/Annum)	13	17.2	CPCB, MoEFCC, Census 2011 population projections	2018-19	13	CPCB, MoEFCC, Census 2011 population projections - 2018-19
Hazardous waste recycled/utilized to waste generated 2019 - Schedule IV hazardous waste	2.06	1.6	CPCB, MoEFCC	2018-19	2.06	CPCB, MoEFCC - 2018-19

Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
Plastic waste generated per 1,000 population (Tonnes/Annum)	1.389		Implementation of plastic waste management rules, 2011 Census population projections	2018-19	1.389	Implementation of plastic waste management rules, 2011 Census population projections - 2018-19
BMW treated to total BMW generated (%)	52.55		CPCB,MoEFCC	2018	52.55	CPCB,MoEFCC - 2018
Grid interactive bio power per 10 lakh population (MW)	0.11	0.12	MNRE(Physical progress Report)	As on 30.11.2020	0.11	MNRE(Physical progress Report) - As on 30.11.2020
<b>SDG 13: Climate Action</b>						
Lives lost due to extreme weather events (per 1 crore population)	Null	Null	MoSPI EnviStats 2020 - Disaster Management Division,2011 Population Projections	2018-19	Null	MoSPI EnviStats 2020 - Disaster Management Division,2011 Population Projections - 2018-19
Disaster preparedness score as per Disaster Resilience Index	7.5		Diaster Risks and Resilience in India - An analytical Study,MHA-UNDP	2019	7.5	Diaster Risks and Resilience in India - An analytical Study,MHA-UNDP - 2019
Share of renewable in total energy mix (including allocated shares)	9.48	13.19	CEA	As on 30.11.2020	9.48	CEA - As on 30.11.2020
CO <sub>2</sub> saved from LED bulbs per 1,000 population (Tonnes)	37.15	40.82	N-Ujala Dashboard D-Projected Population,Census	Live data as on 21.01.2021	37.15	N-Ujala Dashboard D-Projected Population,Census - Live data as on 21.01.2021
DALY rate attributable to air pollution (per 1,00,000 population)	3117		India:Health of the Nation's States 2017 (The India State Level Disease Burden Initiative), MoHFW-ICMR,PHFI and IHME	2016	3117	India:Health of the Nation's States 2017 (The India State Level Disease Burden Initiative), MoHFW-ICMR,PHFI and IHME - 2016
<b>SDG 15: Life on Land</b>						
Forest cover (%)	29.62	29.55	Forest Survey of India 2019	2019	29.62	Forest Survey of India 2019 - 2019
Tree cover (%)	3.33	3.67	Forest Survey of India 2019	2019	3.33	Forest Survey of India 2019 - 2019
Area covered under afforestation schemes (%)	0.29		MoSPI EnviStats 2020	2017-18	0.29	MoSPI EnviStats 2020 - 2017-18
Degraded land over total land area (%)	16.56		National Remote Sensing Centre (Sourced from EnviStats 2020)	2015-16	16.56	National Remote Sensing Centre (Sourced from EnviStats 2020) - 2015-16



Performance by SDG	2020	2019	Data Source	Data Period	2021	Data Source and Period
Increase in area of desertification (%)	1.48	1.48	MoEFCC, Desertification and Land Degradation Atlas of India – Space Applications Centre, Indian Space Research Organisation	2011-13	1.48	MoEFCC, Desertification and Land Degradation Atlas of India – Space Applications Centre, Indian Space Research Organisation - 2011-13
Wildlife crime cases   2020 - per mha of protected area   2019 - absolute number of cases	Null	6	WCCB, MoEFCC	2019	Null	WCCB, MoEFCC - 2019
<b>SDG 16: Peace, Justice, and Strong Institutions</b>						
Murders per 1,00,000 population	4.3	4.35	MHA, NCRB, Crime in India 2019	2019	4.2	MHA, NCRB, Crime in India 2020
Cognizable crimes against children per 1,00,000 population	12.7	9.5	MHA, NCRB, Crime in India 2019	2019	13	MHA, NCRB, Crime in India 2020
Victims of human trafficking per 10 lakh population	6.36	12.66	MHA, NCRB, Crime in India 2019	2019	6.36	MHA, NCRB, Crime in India 2019 - 2019
Missing children per 1,00,000 child population	2.71		MHA, NCRB, Crime in India 2019	2019	2.71	MHA, NCRB, Crime in India 2019 - 2019
Courts per 1,00,000 population	1.87	1.87	MoLJ, Census 2011 Population Projections	Dec-19	1.87	MoLJ, Census 2011 Population Projections - 43800
Cases under PCA and related IPC per 10 lakh population	2.05	5	MHA, NCRB, Crime in India 2019	2019	2.05	MHA, NCRB, Crime in India 2019 - 2019
Births registered (%)	85.6	90.17	MHA, ORGI, Vital Statistics of India based on the Civil Registration System 2018	2018	85.6	MHA, ORGI, Vital Statistics of India based on the Civil Registration System 2018 - 2018
Population covered under Aadhaar (%)	96	90.86	Unique Identification Authority of India	Jan-21	91.22	Unique Identification Authority of India - Nov-21

## Appendix - III

### SDG 2 – Zero Hunger

Indicator	2018	2019	2020	2021	2022	Source	CGR%	Estimation for 2030	Number of years it takes to achieve 100%	To achieve National target, required growth rate	National Target
Beneficiaries under NFSA (%)	18.69	18.79	18.82	19.27	20.67	Department of Food & PD, MoA&FW [Sourced from MoSPI NIF PR 2020 V2.1] - 2019-20	2.03	24.28	70.00	21.78	100
Year	2004-2005	2015-16	2015-16	2019-20							
Children under 5 years who are underweight (%)	56.5	47.8	47.8	39.4		NFHS 3 (2004-5), NFHS 4 (2014-15) and NFHS 5 (2019-120)	-2.23	32.17	-50.00	-26.15	1.9
Children under 5 years who are stunted (%)	49.8	45.3	45.3	39.6		NFHS 3 (2004-5), NFHS 4 (2014-15) and NFHS 5 (2019-120)	-1.42	34.81	-74.00	-17.20	6
Pregnant women (15-49 years) who are anaemic (%)	68.5	62.6	62.6	56.8		NFHS 3 (2004-5), NFHS 4 (2014-15) and NFHS 5 (2019-120)	-1.16	51.12	-57.00	-7.81	25.2
Year	2016-18										
Adolescents (10-19 years) who are anaemic (%)	34					Comprehensive National Nutrition Survey (CNNS)					14.2
Rice and wheat produced annually (Kg/Ha)	2018-19	2019-20	2020-21	2021-22		Directorate of Agriculture					
Rice produced Annually (kg/Ha)	1895	2661	2926	2689		"	9.14	5414.45	-46.00	8.91	5322
Wheat produced annually (kg/Ha)	1847	2046	2337	2076		"	2.97	2622.70	-112.00	12.49	
Year	2011-12	2018-19	2019-20	2020-21							
GVA (constant prices) in agriculture (in Lakhs/worker)	16.1	12.4	10.9	14.5		Jharkhand Economic Survey (2021-22), Pg 12, GVA at Constant prices	-1.04	14.50	-184.00	23.93	1.22

## SDG 4 – Quality Education

Indicators	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	CGR (%)	Estimation for 2030	Number of Years it takes to achieve 100%	To achieve 100% goal in 2030, require growth rate	National Target
ANER in elementary education (class 1-8)	89.64	90.81	91.03	91.95	90.07	89.88	88.46	89.3	-0.26	87.03	-54.00	1.14	100.00
Average annual dropout rate at secondary level (class 9-10)		24.74	23.9	24.87	26.52	9.48	22.25	16.62	-7.89	7.31	-32.00	19.66	8.80
GER in higher secondary (class 11-12)	27.65	35.01	37.65	36.38	27.1	41.2	38.89	40.79	3.91	59.87	13.00	9.38	100.00
Class 8 students achieving minimum proficiency level in language and maths (%)													
Class 8 students achieving minimum proficiency level in language (%)						89.2							100.00
Class 8 students achieving minimum proficiency level in maths (%)						78.8							100.00
GER in higher education (18-23 years)	12.1	13.1	15.4	15.5	17.7	18	19.1	20.9	7.80	44.31	11.00	16.95	50.00
Persons with disability (>15 years) having completed secondary education (%)													
GPI for higher education (18-23 years)	0.98	0.91	0.93	0.92	0.93	0.96	0.96	1	0.61	1.06	0.00		1.00
Persons (>15 years) who are literate (%)													
Schools with access to electricity, drinking water (%)													
schools with access to electricity				16.15	32.19	47.46	72.78		63.31	16037.99	-10.00	3.23	100.00
school with access to waater				83.98	87.59	93.91	96.71		5.05	166.35	-10.00		100.00
Trained teachers at secondary level (class 9-10)				69.75	69.69	72.74	80.12		4.69	132.69	-6.00		100.00
Pupil Teacher Ratio at secondary level (class 9-10)	48	68	61	62	55	59	51	34	-4.73	29.92	-25.00	11.39	30.00



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