



DEVELOPMENT
ALTERNATIVES

MAPPING SCOPE OF MGNREGS ON SDGs



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giz German Engineering
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Cooperation GmbH



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- Photo Credits** : Cover photo: 14 December 2013, Rajasthan - Women employed by MGNREGA in Rajasthan. [Photo: Shashank Jayaprasad/UNDP India]

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About Development Alternatives Group (DA)

Development Alternatives (DA), the world's first social enterprise dedicated to sustainable development, is a research and action organisation striving to deliver socially equitable, environmentally sound and economically scalable development outcomes. DA's green technology innovations for habitat, water, energy and waste management, which deliver basic needs and generate sustainable livelihoods, have reduced poverty and rejuvenated natural ecosystems in the most backward regions of India.



About GIZ

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is an international agency for sustainable development. GIZ India, as mandated by the German Federal Ministry of Economic Cooperation and Development (BMZ) has been implementing a bilateral project, 'Environmental benefits of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)' in partnership with the Ministry of Rural Development, Government of India since 2013. The objective of the project is to augment the environmental benefits from enhanced natural resource management focus within MGNREGA activities, to help secure the livelihoods of the rural poor and to protect them against the effects of climate change.

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List of Abbreviations

BRGF	Backward Regions Grant Fund
GDP	Gross Domestic Product
GP	Gram Panchayat
GS	Gram Sabha
ILO	International Labour Organization
INDC	Intended Nationally Determined Contributions
IWMP	Integrated Watershed Management Programme
MGNREGA	Mahatma Gandhi National Rural Employment Gaurantee Act
MoSPI	Ministry of Statistics Planning and Programme Implementation
NAP	National Afforestation Programme
NDC	Nationally Determined Contribution
NER	Net Enrolment Ratio
NHM	National Horticulture Mission
PO	Programme Officer
PMKSY	Pradhan Mantri Krishi Sinchayee Yojana
SDG	Sustainable Development Goal
SoR	Schedule of Rates
TOF	Trees Outside Forest
UN-IAEG	United Nations – Inter Agency and Expert Group on SDGs Indicators
VNR	Voluntary National Review
WHO	World Health Organization
WPR	Workforce Participation Ratio

Abstract

In 2015, world leaders from the 193 UN member states came together to adopt a set of **17 Goals and 169 targets** aimed to achieve sustainability in development practices. The agenda looks beyond the Millennium Development Agenda, and sets a post 2015 UN Sustainable Development Agenda framework. The UN Sustainable Development Agenda provides an opportunity to renew and integrate efforts in order to meet, to a significant degree, national and global aspirations for sustainable living in a defined time frame. As signatory to the 2030 Agenda for Sustainable Development, India has committed to participate in the successful implementation and international review of progress of SDGs on a regular basis, towards which the **Voluntary National Review (VNR)** was brought out this year.

The NITI Aayog entrusts the Ministry of Rural Development as the nodal agency for implementing **SDG 1** (No poverty), and mentions MGNREGA as a ‘core of the core’ scheme integral to achieve the goal, since the MGNREGA features as a flagship scheme for ensuring social protection in rural India. The Scheme currently reports its contribution to benefit women (**SDG 5**), vulnerable and poor sections (**SDG 10**), and employment benefits (**SDG 8**).

The study was initiated with the hypothesis that there are many other potential links of MGNREGS of its contribution in achieving SDGs, given its unique design of creating employment opportunities, and creating infrastructure and economic utilities for better livelihoods.

The aim of the study is to support the Ministry of Rural Development, India, in implementing, tracking and achieving Sustainable Development Goals. The study maps and tracks the current potential of MGNREGS and its contribution towards achieving Sustainable Development Goals. The study undertakes a comprehensive assessment of the scope of MGNREGS’ contribution in achieving SDGs, and provides an action plan for the government to make its reporting to VNR more effective. According to the study, MGNREGS contributes to **13 Goals and 27 targets** of Sustainable Development Goals. There are **32 indicators** identified by the study that MGNREGS should measure in order to track its contribution in achieving SDGs. A phase-wise action plan for the Ministry of Rural Development is also developed in order to start collecting and tracking data on all these parameters. The overall objective is to map the holistic impact of MGNREGS on achieving SDGs.

This study must be interpreted as a foundational study to build a framework for tracking national flagship programmes on SDGs. There are some identified limitations to the study. It has currently used publicly available data on MGNREGS. However, there are certain data points that are understood to be available with the Ministry of Rural Development, but are currently not identified in the study. The study has identified some targets in potential links category; but some targets are not assessed completely due to inability to find relevant data or appropriate methodologies. However, it is suspected that relevant data and methodologies do exist, or can be developed by those with greater understanding of the sector. It is hoped that further studies will build on the framework, add more indicators, fill data gaps, and benchmark the indicators identified in the current study.

About the Study

Background

India's Development Context

India's had a remarkable **economic growth** rate of 8.7 per cent per annum between 2004-05 and 2009-10. Prospects in terms of the growth rate look promising; the World Bank has predicted a growth rate of 8 per cent for India by 2017. (Press Trust of India, 2015) The paradox of India's story is that the economic growth has not translated into fully solving the most pertinent problems of the nation and some of the rudimentary needs of its people.

In 2014, a report by the Indian Government Planning Commission estimated that 363 million Indians, making up 29.5% of the total population, were living below the poverty line in 2011-12 (Katyal, 2015), while one per cent of the Indian populace controlled 50 per cent of the nation's total wealth. The concern is that high growth rate had an inadequate impact on **job generation**. Financial Times (as cited in Bhaduri, 2008) reported that TATA steel plant in Jamshedpur, from 1991 to 2005, increased its steel production by a factor of five, while the employment dropped to half. The Economic Survey 2013 has cautioned that by 2020, India could face 16.7 million 'missing jobs'. (Mathew, 2014) The Indian population has a long way to go to achieve **basic living standards**. India had a 20.6 per cent share of the world's poorest in 2011. (Donnan, 2014) India stands low on rank 135 among 187 countries on the Human Development Index, with 58% of the population lacking means to meet essential needs. The **environment** has been exploited massively in the last few decades. According to the Global Footprint Network in 2012, India's ecological footprint exceeded its bio-capacity by 160%. With 70 per cent of surface water polluted, and 60 per cent of ground water sources expected to be in critical state by next decade, the impending water crisis is at India's door steps. (Asia Development Bank Institute, 2012)

India is confronted with the challenge of sustaining development amidst the threat of **climate change**. India stands 18th in the world on the Climate Risk Index, with a score of 38.50 (Kreft & Eckstein, 2013), indicating the high level of exposure and vulnerability to extreme events. Evidence has shown that impacts of climate change will be felt most acutely by the people whose livelihoods are most dependent on natural systems, estimated around 700 million in India. (Satapathy, et al., 2011) Furthermore, being the third largest carbon emitter in the world, India will also have to devise ways to reduce its carbon emissions while choosing its development options. Achievement of India's vital development goals related to other systems such as habitats, health and energy demand, and infrastructure would impact, as well as be impacted by, climate change. (Planning Commission, 2011)

India's Global Commitments

The year 2015 witnessed the adoption of **Sustainable Development Goals (SDGs)** by the world leaders at the 70th UN Summit. The SDGs, officially known as “Transforming Our World: The 2030 Agenda for Sustainable Development”, are an intergovernmental set of 17 aspirational Goals with 169 targets, committed by the 193 member states of the United Nations. **India** is one of the nations that signed the adoption of post 2015 development agenda, and in principle aimed to achieve the 17 Sustainable Development Goals by 2030. The post 2015 UN Sustainable Development Agenda framework provides an opportunity to renew and integrate efforts in order to meet, to a significant degree, national and global aspirations in a defined time frame.

The UNFCCC Conference of Parties in December 2015 adopted the **Paris Agreement**, which provides a multilateral framework for low-carbon transformation of the world economy. In order to reach a global climate agreement to reduce emissions, so that the world stays below the 2 degree target, countries publicly outlined the climate actions they intend to take after 2020, known as their Intended Nationally Determined Contributions (INDCs), at COP21, the Paris Agreement. At COP 21, **India** also committed to transition to low carbon economy, with specific targets on climate mitigation and adaptation.

As signatory to the 2030 Agenda for Sustainable Development, India has committed to participate in the successful implementation and international review of progress of SDGs on a regular basis, towards which the **Voluntary National Review (VNR)** was brought out this year. The VNR has been useful for both general public and institutional bodies - allowing for a reorientation towards existent policies, especially those requiring stringent implementation and those which need increased focus. In the **High Level Political Forum 2017**, India has reported on its detailed three year action plan/agenda to align with the SDG targets.

At the HLPF 2017, India reported on Goals 1, 2, 3, 5, 9, 14 and 17. NITI Aayog, the premier think tank of the Government of India, has recently released a draft Three-Year Action Agenda covering years 2017-18 to 2019-20. In parallel, work on a 15-year vision and 7-year strategy document is in its advanced stages. Reflecting the country's long-standing federal tradition, these documents are being prepared with active participation of the sub-national governments. (Government of India, 2017)

Mahatma Gandhi National Rural Employment Guarantee Scheme



Source: Development Alternatives

The Mahatma Gandhi National Rural Employment Guarantee Scheme (Act, 2005) is a flagship programme of the Department of Rural Development under the aegis of the Ministry of Rural Development. The programme was first implemented in February 2006, and aims to strengthen the livelihood security and resource base of the country's poor, by guaranteeing hundred days of wage employment in a financial year to rural households. (Ministry of Rural Development, 2013)

The benefits of MGNREGS are delivered across 685 districts in the country (Ministry of Rural Development, 2017), and nearly 251 million beneficiaries are enrolled as active workers (MGNREGS- At a Glance page). The programme has numerous positive implications and tries to address a wide spectrum of issues, vis-à-vis, mandating inclusion of women as one-third of the beneficiaries (gender equality); inclusion of SC/ST workers (social equality); implementing works on agriculture, watershed management and forest fire prevention (natural resource management and conservation); and construction of houses and sanitation facilities (basic needs fulfilment).

A study was carried out by Institute of Economic Growth to assess the impact of works under MGNREGS on sustainable livelihoods. According to the study, income of poor households rose by 11 per cent, and farm productivity by up to 32 per cent, due to various works carried out under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS). The income mentioned in the findings of the study is other than the wages given for works carried out under MGNREGS. (PTI, 2017)

An indicative document by the NITI Aayog entrusts the Ministry of Rural Development as the nodal agency for implementing **SDG 1** (No Poverty), and mentions MGNREGS as a ‘core of the core’ scheme integral to achieve the goal. The MGNREGS features as an important social protection scheme. It is structured to benefit women (**SDG 5**) and the disadvantaged sections of the society (**SDG 10**). Innovations in the use of MGNREGS funds have also holistically contributed to attributes of **SDG 2** (Sustainable Agriculture), **SDG 6 and 15** (Conserving Water Systems), and **SDG 13** (Climate Change Adaptation).

MGNREGS has been reported in the **Voluntary National Review Report 2017** by the Government of India, in its contribution for achieving SDG 1, SDG 5, SDG 8 and SDG 10. Under **SDG 1**, Ending Poverty in all forms, MGNREGS is seen as an important strategy for achieving this goal. It focuses on generating meaningful employment by developing agricultural infrastructure, productive assets and entrepreneurship-based livelihood opportunities. MGNREGS’s contribution as the world’s largest cash transfer programme is recognised under **SDG 8** which says, “Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”. MGNREGS has generated over 2 billion person-days of employment during the last year. It has helped reduce extreme poverty, as well as enhance the infrastructure and purchasing power in rural areas. The benefits have largely been reaped by women and the disadvantaged sections of the society, thereby contributing to **SDG 5** (Achieve gender equality and empower all women and girls) and **SDG 10** (Reduce inequalities within and among countries), respectively. For raising the level of female labour force participation, a number of initiatives are being implemented, including Stand-up India and MGNREGS. (Government of India, 2017)

Scope of the study

Objectives

The aim of the study is to support the Ministry of Rural Development, India, in implementing, tracking and achieving the Sustainable Development Goals. MGNREGS is the flagship programme of the ministry. The study aims to map and track the current and potential contribution of MGNREGS to the Sustainable Development Goals. The purpose of the study is to make a comprehensive assessment of the scope of MGNREGS’s contribution in achieving SDGs. The two specific objectives of the study are:

- ***To map the scope of MGNREGS in achieving SDGs***

The study matches the current activities undertaken under MGNREGS with the actions required under various SDGs targets. This exercise maps the SDGs related to MGNREGS.

- ***To develop a phase-wise action plan for execution***

The study proposes an action plan to the Ministry of Rural Development to implement tracking of MGNREGS on the identified SDGs, and therefore track the true impact of MGNREGS, beyond only employment days that are generated. The action plan includes –

new data, revisions in data points, methodologies of data collection, and phase wise plan to scale up at the national level.

Approach

The study has taken the following steps for achieving its objectives:

- **STEP 1: Map goals under MGNREGS and indicators to track the progress of the goals**

As a first step, suitable indicators are identified against the goals of MGNREGS. Since the goals and work categories are not aligned as one-to-one in the scheme, the study has identified parameters in cognizance, and clubbed them under different goals of MGNREGS. The source of data for the indicator is also identified. In cases where data is not available for the indicator, the available set of data is mentioned along with the gap of information in finding the indicator value.

- **STEP 2: Map SDG targets & indicators in relation to the goals of MGNREGS**

SDG targets are mapped against the links it has with MGNREGS goals. The study has classified the 169 targets into three categories:

- Targets that are directly linked: These targets will have an impact of the work under MGNREGS, as per the current design, goals and work categories of the MGNREGS.
- Targets that are indirectly linked: These targets are not in the mandate of MGNREGS, but have an indirect effect, as corroborated by studies and research.
- Targets that are potentially linked: These targets have unexplored links with MGNREGS, which may have manifested in some states, as a part of the approach/strategy taken at the state level.
- Targets that are not considered in the study.

The study maps the first two categories of the targets and their indicators against MGNREGS goals and indicators, to explore the potential of tracking MGNREGS on various SDGs, beyond the current scope of mapping it for employment creation and social protection for the poor. The indicators used for this assessment are based on the most revised version of UN-IAEG's green listed indicators and indicators developed by the Ministry of Statistics of Planning and Implementation.

- **STEP 3: Indicator Matrix of MGNREGS over SDGs**

A matrix is developed that overlays SDG targets and indicators over goals and indicators of MGNREGS. The matrix classifies indicators on the basis of whether data is available, whether data can be derived and whether data is currently not tracked.

- **STEP 4: Phase wise action plan for execution**

A phase wise plan for the Ministry of Rural Development will be developed. The purpose is to move towards a more holistic tracking of MGNREGS by measuring its scope and potential of achieving the 17 SDGs. This will include – identification of data gaps in MIS data, testing of data methodologies, pilots of data collection, phase wise scaling up of data derivations and including it in MIS systems of MGNREGS.

Tracking MGNREGS' contribution to SDGs

According to the study, MGNREGS contributes to **13 Goals and 27 Targets** of Sustainable Development Goals. There are **42 Indicators** identified by the study that MGNREGS should measure in order to track its contribution in achieving SDGs. Out of 42 indicators, data for 15 indicators is available, partial data for 17 indicators, and no data for 10 indicators.

The table below summarises the Sustainable Development Goals, targets and indicators that are relevant to MGNREGS. The table also maps the SDG targets to its possible contribution in MGNREGS and possible indicators that MGNREGS can track against the given SDG indicator. The table further identifies data availability of the indicator mapped for tracking MGNREGS on SDGs.

Following are keys to study the table:

- Targets are colour coded in two categories:

Target X	Targets that are directly linked to MGNREGS - Targets of the SDGs that are aligned to overall objective of MGNREGS, as reported to Voluntary National Reporting by India.
Target Y	Targets that are indirectly linked to MGNREGS -: These comprise of targets that are in the goals of MGNREGS, but currently not tracked as outcomes or impact by MGNREGS in national reporting by MoRD.

- Indicators are classified into three categories:

Indicator A	Green indicators identified by UN-IAEG
Indicator B	Indicators that are in the UN-IAEG list and are also found in the list of SDG indicators developed by the Ministry of Statistics, Planning and Implementation (MoSPI), India
Indicator C	Indicators only in the list that MoSPI developed for tracking SDGs

- Data is marked available, partially available or not available based on whether data for all the measures in the indicators are available, some data is available (partial), or no data is available.

Table 1: Summary of SDGs indicators to track MGNREGS

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai-lability	Observations
GOAL 1: End poverty in all its forms everywhere						
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location Percentage of resource allocated by the government directly to poverty reduction programme	MGNREGS is part of the resources allocated by government directly to poverty reduction	Percent of total annual budget allocated to MGNREGS	MoRD and Press Information Bureau	Yes	Study annual trends in budget allocation at the national level to gauge MGNREGS's expansion and efficiency, and also as proportion of total budget for poverty alleviation in the country
			Percent of total poverty alleviation budget allocated to MGNREGS		Yes	
1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.1 Proportion of population living below the national poverty line, by sex and age 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions Percentage of resource allocated by the government directly to poverty reduction programme	MGNREGS is part of the resources allocated by government directly to poverty reduction	Percent of total budget allocated to MGNREGS	MoRD and Press Information Bureau	Yes	Study annual trends in budget allocation at the national level to gauge MGNREGS's expansion and efficiency, and also as proportion of total budget for poverty alleviation in the country
			Percent of total poverty alleviation budget allocated to MGNREGS		Yes	
1.3 Implement nationally appropriate social protection systems and measures for all, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, new borns, work-injury victims and the poor and the vulnerable Percentage change in ST students under post matric scholarship	MGNREGS is a social protection scheme, and all covered under MGNREGS add to this indicator	Population covered by MGNREGS classified in categories of UN-IAEG indicator	Total Individuals Employed: MGNREGS website	Yes	Categories of individuals in MGNREGS include women, SC/ST and disabled workers
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 basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services, including micro finance	1.4.1 Proportion of population living in households with access to basic services 1.4.2 Proportion of total adult population with secure tenure rights to land, and who perceive their rights to land as secure, by sex, type of tenure No of accounts opened under PMJDY by Rural/Urban No of a/c's with zero balance under PMJDY Number of beneficiaries from housing loans Number of beneficiaries for Bank loan for purchasing motor vehicles and other durable goods Number of enterprises getting loan from banks	MGNREGS wages come directly in your bank account without any in-cash payments; this has led to wage employees opening bank accounts, contributing to the indicator	Number of accounts opened for MGNREGS wage disbursement	Bank and post office accounts: MGNREGS Website	Yes	Data on total number of accounts opened till date is available; there is also data on total wages disbursed in a year, and those disbursed through bank accounts
			Percent of MGNREGS wage workers financially linked to bank/post office accounts	Bank/Post Office Accounts Opened and Amount Disbursed on NREGA Portal	Yes	Aadhaar seeding is also a mandate for ensuring financial inclusion and reducing leakage of funds to ensure equal rights to economic resources for the poor

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Availability	Observations
GOAL 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture						
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	2.1.1 Prevalence of undernourishment 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	Higher income due to wage employment can translate into better dietary choices	Prevalence of undernourishment in MGNREGS families (households)	Not collected	No	Change in prevalence of undernourishment in families employed under MGNREGS can be found by assessing correlation between the two (<i>Empirical studies required</i>)
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	2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)	Higher income due to wage employment can translate into better dietary choices	Prevalence of stunting in MGNREGS families (households)	Not collected	No	Change in prevalence of stunting in families employed under MGNREGS can be found by assessing correlation between the two (<i>Empirical studies required</i>)
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 that progressively improve land and soil quality	2.4.1 Proportion of agricultural area under productive and sustainable agriculture Percent change in use of modern equipment (tractor, thrasher etc) % increase of area under HYV Total cropped Area under Irrigation Total cropped Area under Rain Fed Percent change in Forest Area coverage Percent change in Watershed area Percent change in Rain-fed area Percent change in Area under mangroves	MGNREGS, as a part of its goals, focuses on rejuvenating natural resource base with activities of water conservation, irrigation, afforestation and land development amongst many others conducted	Change in cropped area under irrigation due to MGNREGS	MGNREGS website (needs collation)	Partial	Data available is on number of irrigation related works; need data on number of water conservation and irrigation structures built under MGNREGS, as per size and type, to derive irrigated cropped area change
			Percent change in forest area coverage	Not collected	No	Number of horticulture works that involve plantation based agriculture can be tracked here; need studies to derive such data
			Percent change in watershed area	MGNREGS website (needs collation)	Partial	Data is available on “soil and water conservation” and “drainage” related works; need to derive data , use geotags to assess watershed coverage

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai-lability	Observations
GOAL 3: Ensure healthy lives and promote well-being for all at all ages						
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	<p>3.9.1 Mortality rate attributed to household and ambient air pollution</p> <p>3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)</p> <p>3.9.3 Mortality rate attributed to unintentional poisoning</p> <p>Percentage of women aged 15-49 years with a live birth in a given time who received antenatal care, four times or more</p> <p>Percentage of children aged 12-23 months who received the three doses of pentavalent vaccine before their first birthday</p> <p>Percentage of children under 5 years with suspected pneumonia in two weeks preceding the survey who sought care from appropriate health facility or provider</p> <p>Percentage of TB cases successfully treated</p> <p>Percentage of people living with HIV currently receiving ART</p> <p>Percentage population in malaria-endemic areas who slept under an ITN the previous night</p> <p>Percentage population using safely managed drinking water services and using safely managed sanitation services</p> <p>Proportion of population aged 18 years and older who are currently taking antihypertensive medication among number of adults 18 years and older</p> <p>Number of outpatient department visit per person per year and hospital(inpatient) admission per 100 population per year</p>	Water and sanitation facilities constructed under MGNREGS enable access to sanitation, thus impacting mortality rates	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	Individual Household Latrines: MGNREGS website ¹ Total rural drinking water works: MGNREGS website MGNREGS website (convergence) Rural sanitation infrastructure MGNREGS website	Partial	Impact on mortality rates due to sanitation works under MGNREGS can be found by conducting <i>empirical studies</i>
	Percentage population using safely managed drinking water services and using safely managed sanitation services		Percentage population using safely managed drinking water services and using safely managed sanitation services	Individual Household Latrines: MGNREGS website ² Total rural drinking water works: MGNREGS website MGNREGS website (convergence) Rural sanitation infrastructure MGNREGS website		

¹ This data is available and can be calculated by data points available in the MGNREGS database: HH provided with sanitation facilities; public toilets built.

² This data is available and can be calculated by data points available in the MGNREGS database: HH provided with sanitation facilities; public toilets built.

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai-lability	Observations
GOAL 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all						
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	4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i)reading and (ii) mathematics, by sex Net Enrolment Ratio (NER) at Primary/ Upper-Primary/ Secondary/ Senior Secondary levels	Wage employment through MGNREGS may allow parents to send their children to school	Net Enrolment of children of MGNREGS workers in educational institutions	Not available	No	The possible link between retention of MGNREGS workers' children in schools and reduced migration due to decent wage employment provided by MGNREGS can be explored through <i>empirical studies</i>
GOAL 5: Achieve gender equality and empower all women and girls						
5.1 End all forms of discrimination against all women and girls everywhere	5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex	MGNREGS mandates 1/3 rd of the work to be given to women	% of women employed under MGNREGS	MGNREGS website ³	Yes	MGNREGS' role in providing decent work opportunities to women, and change in women participation, as informal labour may be explored through empirical studies.

³ Women person days as percentage of total

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Availability	Observations
GOAL 6: Ensure availability and sustainable management of water and sanitation for all						
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services	MGNREGS builds drinking water facilities in convergence with other rural development schemes as a part of its goals	Percent of HH/people provided with drinking water facilities	Convergence: MGNREGS website ⁴ Total rural drinking water works: MGNREGS website	Partial	Information on rural drinking water works (convergence schemes and otherwise) is available and number of people accessing the facilities can be derived
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	As a part of work, MGNREGS builds water & sanitation facilities (Goal 4)	Percent of HH/people provided with sanitation facilities ⁵	Individual Household Toilets: MGNREGS website ⁶ Rural sanitation works: MGNREGS website	Yes	Information on rural sanitation works (convergence, individual and overall) is available and number of people accessing the facilities can be derived; this may also be substantiated qualitatively with case studies and examples
6.5 By 2030, implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate	6.5.1 Degree of integrated water resources management implementation (0–100) 6.5.2 Proportion of trans-boundary basin area with an operational arrangement for water cooperation Percentage of River basins brought under Integrated Water Resource Management	MGNREGS contributes to water resource management, such as by works under the Natural Resource Management category (water harvesting and conservation works; works on renovation of traditional water bodies etc.)	Percentage financial contribution of MGNREGS in water management and conservation works (as mentioned in the Mission Water Conservation framework ⁷)	Expenditure on water related (harvesting and conservation, and traditional water bodies' renovation works): MGNREGS website ⁸	Partial	The contribution by MGNREGS can be derived from total expenditure on water management and conservation works (resourced directly by MGNREGS and in synergy with Mission Water Conservation)

⁴ The data does not track HH with drinking water facilities, but tracks drinking water structures built.

⁵ Structures such as soak-pits, trenches and drainage lines, etc.

⁶ This needs to be derived against total number of households.

⁷ Mission Water Conservation is an initiative of the Ministry of Rural Development, and looks at synergies between MGNREGS, Integrated Watershed Management Programme (IWMP) and Pradhan Mantra Krishi Sinchayee Yojana (PMKSY), with respect to their water resource management and conservation works. We assume that all synergistic water related works done under MGNREGS after release of the framework feed into Mission Water Conservation. A distinction in the data based on synergies is not clear on the portal.

⁸ Geo-tagging of water management structures can enable complete data availability for Target 6.5. Convergence data under Mission Water Conservation not available, only budget allocations have been mentioned in newspaper articles.

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Availability	Observations
GOAL 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all						
8.5 By 2030, 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	8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities 8.5.2 Unemployment rate, by sex, age, persons with disabilities Workforce participation Ratio (WPR) of women, youth, persons with disabilities Wages earned by male-female in regular / casual employment Existence of legal protection system- equal pay for equal work Average income of workers (indicator for decent work) Employment/social protection for persons with disabilities Labour productivity growth (percentage) Annual increase in minimum real wages Share of unemployed persons in population aged 15-24 A measurement of decent work/quality of life of workers (as per Ministry's vision - to be proposed by the Ministry)	MGNREGS impact the wage rates in the region, gender differentiation in wage rates and access to wages by the most vulnerable in the region.	Wages earned by male-female in regular/ casual employment	Notification for Revised Wage Rate on NREGA Portal	Yes	Data is available on state wise wage rates; wages earned can be derived from wage rates and total individuals employed, for number of days
			Existence of legal protection system - equal pay for equal work	Page 16 of MGNREGA Operational Guidelines, 2013	Yes	As per MGNREGA (2005), all workers are entitled to the notified wage rate and equal pay for men and women
			Employment/ social protection for persons with disabilities	Disabled persons employed under MGNREGS	Yes	As per MGNREGS Operational Guidelines, 2013, Section 9.3, Page 78, MGNREGS creates special conditions to facilitate inclusion of disabled persons in the scheme
			Share of unemployed persons in population aged 15-24	Not collected	No	Number of people employed for the first time in MGNREGS can be derived to trace the impact of MGNREGS in reducing unemployment; need to device data methodology study
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	8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status 8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources Proportion of workers covered under ESI Act Proportion of workers covered under health insurance Accommodation in working women's hostel Number of migrants workers Employment generated under MGNREGA	As MGNREGS is a mass employment guarantee scheme, labour standards under the scheme contribute to achieving the target	Frequency rates of fatal, non-fatal occupational injuries, by sex and migrant status	Not collected	No	The Operational Guidelines 2013 allow for Administrative Expenditure to ensure worksite facilities for emergency treatment of minor injuries, medical treatment and hospitalisation in case of fatal injury to workers while working under the scheme; micro data can be available on number of such cases
			Employment generated under MGNREGA	Total Individuals employed on MGNREGS website	Yes	Rate of growth of employment under MGNREGS can be studied in proportion to the rate of total employment growth in the country to calculate the contribution of MGNREGS in employment generation in the country , per year

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai-lability	Observations
GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation						
9.1 Develop quality, reliable, sustainable and resilient infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.	9.1.1 Proportion of the rural population who live within 2 km of an all-season road 9.1.2 Passenger and freight volumes, by mode of transport	Under Goal 4, Road and infrastructure is developed under MGNREGS	Proportion of the rural population who live within 2 km of an all-season road	Length of all-season roads built – Rural connectivity work under MGNREGS	Partial	There is data on length of roads built under MGNREGS; need to derive data on increase in population with access to all-season roads built under MGNREGS; need a study to devise clear methodology
GOAL 10: Reduce inequality within and among countries						
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	MGNREGS wage benefits and self-employment activities contribute in HH income	Increase in income of population enrolled in MGNREGS <i>through Wage Employment</i>	Wage data from MIS data on MGNREGS website ⁹	Partial	Data for the indicator can be derived by total wages disbursed to BPL households under MGNREGS adjusting to average income of BPL; need a study to devise clear methodology
			Increase in income of population enrolled in MGNREGS <i>through Self-employment after the Creation of Assets</i>	MIS data on Assets Created for Vulnerable Section under MGNREGS	Partial	The Assets created are grouped into Assets that improve livelihood in rural areas; expected increase in income due to these assets can only be derived through empirical studies
			Increase in income of population enrolled in MGNREGS <i>who gained regular employment after Skill Enhancement</i>	People skilled through BFT, CFT , LIFE programmes ¹⁰ , Skilled for wages , for self-employment and for livelihood upgradation ¹¹	Partial	Data is available on various skills programmes and initiatives under MGNREGS; however, increase in income after skill enhancement will require empirical studies to be conducted; registered staff of MGNREGS also contributes to employment by scheme
10.4 Adopt policies, especially wages & social protection policies, & progressively achieve greater equality	10.4.1 Labour share of GDP, comprising wages and social protection transfers	MGNREGS is a social protection transfer.	Labour share of GDP, comprising wages and social protection transfers	NREGA Portal for disaggregated data on Labour Budget ¹² NITI Aayog Statistics	Yes	Data is available on total expenditure on wages under MGNREGS; using the GDP of the country, this can be computed; need a study to devise clear methodology

⁹ The MIS data on MGNREGS website does not disaggregate wages for individuals based on their BPL status. However, as per [MGNREGA Operational Guidelines, 2013](#), the entry of registration details in MGNREGA Soft includes the BPL status of the household

¹⁰ Data is also available on the [demand of skilling, sector wise](#), based on LIFE survey conducted. It also includes [survey](#) of those who completed 100 days of employment and are interest and not interested in livelihoods.

¹¹ There is data available on whether [skilling of MGNREGS workers under SRLM and SNSM](#) is being done, perhaps based on Life survey results.

¹² Data disaggregated on National, State, District, Block and Panchayat Level

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Availability	Observations
GOAL 13: Take urgent action to combat climate change and its impacts						
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	<p>13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population</p> <p>13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030</p> <p>13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies</p> <p>Number of states with strategies for enhancing adaptive capacity and dealing with climate extreme weather events.</p>	MGNREGS focuses on building resilient infrastructure, providing secure, extra wage employment post disasters and reconstruction of structures required post disasters.	Climate resilient infrastructure investments under MGNREGS	Drought proofing, flood control and water conservation works: MGNREGS website ¹³	Partial	The drought-proofing works, flood-control works and water harvesting and conservation infrastructure built by MGNREGS have a climate resilience purpose and related co-benefits; this link needs to be explored by studies and obtaining work-level data determining the type of works/activities
			Investments by MGNREGS during post disaster recovery phase	Extra wage days: MGNREGS website	Partial	MGNREGS also contributes to recovery by providing extra wage days in certain circumstances; specific data on post-disaster infrastructure isn't available in public domain
13.2 Integrate climate change measures into national policies, strategies and planning	<p>13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production</p> <p>Pre-2020 action Achievements of pre-2020 goals as per countries' priorities Achievement of Nationally Determined Contribution (NDC) goals in post-2020 period.</p>	As per the Goals and work categories of MGNREGS, the infrastructure built has to be in line with climate resilience attributes	Number of States that have integrated climate change in planning of MGNREGS activities	Not collected	No	Identifying climate vulnerabilities and stress of an area, and using the same while planning for MGNREGS works can integrate climate action in MGNREGS, thereby moving beyond co-benefits to climate from MGNREGS; in order to track this indicator, a frame for climate adaptive planning under MGNREGS will have to be developed and states will have to be evaluated on the given basis

¹³ Expenditure on water harvesting and conservation, flood proofing and drought control (relation to climate change) MGNREGS also is used by many states to work for rebuilding and stressed livelihood support during post disaster recovery phase.

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai-lability	Observations
GOAL 13: Take urgent action to combat climate change and its impacts						
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	<p>13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula</p> <p>13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions</p> <p>Number of States that have integrated climate mitigation and adaption in education curricula and outreach programs</p>	MGNREGS in their outreach programmes acknowledging the impact of CC in rural areas	Number of states where MGNREGS integrated climate mitigation and adaption in outreach programmes		No	MGNREGS has an elaborate communication and outreach programme; integrating climate change vulnerabilities and information into the outreach plans can contribute to the given indicator; this can be done by assessing the outreach module of MGNREGS at the state level; <i>require assessment studies</i>
GOAL 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development						
14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	<p>14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches</p> <p>Percentage change in area under mangroves</p>	Managing coastal ecosystem is one of the work categories under MGNREGS	Proportion of national exclusive economic zones managed using ecosystem-based approaches under MGNREGS	MGNREGS website¹⁴	Partial	Collation and aggregation of individual work-level data on specific works done under the master-work category 'Coastal Areas' to ascertain MGNREGS' contribution to marine ecosystem conservation; this will also require data methodology studies in order to derive the given indicator

¹⁴ MGNREGS has a category for maintaining coastal areas, and it tracks expenditure on the same category. It is not clear if these are conservation efforts.

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai-lability	Observation
GOAL 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						
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and dry lands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area 15.1.2 Percentage of Tree outside forest (TOF) in total forest cover. <i>Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type</i>	Afforestation and roadside tree plantations are identified work categories for achieving one of the goals of MGNREGS	Percentage of contribution by MGNREGS to trees outside forest in total forest cover	Length of roads lined: MGNREGS website Length of road plantations maintained: MGNREGS website¹⁵ Total plantation related works: MGNREGS website	Partial	Collation and aggregation of work-level data on specific works done under land development, afforestation and plantation categories; this will also require data methodology studies in order to derive the given indicator, i.e., conversion of plantation done to equivalent proportion of tree cover outside forests
15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation by [x] per cent globally	15.2.1 <i>Progress towards sustainable forest management</i> Percent change in Forest Area coverage Area covered under afforestation scheme Tree cover achieved outside forest area Number of Nagar vans and School Nurseries created.	Afforestation and roadside tree plantations are identified work categories for achieving Goal 3 of MGNREGS	MGNREGS's contribution to tree cover achieved outside forest area	Length of road lined: MGNREGS website Length of road plantations maintained: MGNREGS website¹⁶ Total plantation related works: MGNREGS website	Partial	Collation and aggregation of work-level data on specific works done under land development, afforestation and plantation categories; this will also require data methodology studies in order to derive the given indicator, i.e., conversion of plantation done to equivalent proportion of tree cover outside forests
15.3 By 2020, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land- degradation-neutral world	15.3.1 <i>Proportion of land that is degraded over total land area</i> % of restoration of degraded area Increasing Tree cover in degraded area Percentage of net sown area increased.	Land development activities are a part of Goal 3 on natural resource base	Per cent of restoration of degraded land under MGNREGS of the total degraded land restored	MGNREGS website¹⁷	Partial	The indicator can be substantiated with collation of data from work-level entries into all categories of activities permissible under land restoration works; this will help us ascertain the total area of land restored by specific works

¹⁵ The overall category of work is Afforestation and Plantation related works, but the portal tracks data specifically on roadside lined with trees and managed, and total number of completed plantation related works. Data on number of trees in the latter could not be found on the portal.

¹⁶ The overall category of work is Afforestation and Plantation related works, but the portal tracks data specifically on roadside lined with trees and managed, and total number of completed plantation related works. Data on number of trees in the latter could not be found on the portal.

¹⁷ MGNREGS portal tracks overall expenditure on land development, not specifying works and activities. This data may be available at individual work level and can be collated.

SDGs	Global/National Indicators	MGNREGS Contribution	MGNREGS Indicator	Data Source	Avai- lability	Observations
GOAL 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						
16.6 Develop effective, accountable and transparent institutions at all levels	<p>16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)</p> <p>16.6.2 Proportion of population satisfied with their last experience of public services</p>	Degree of transparency and accountability of MGNREGS	Proportion of population satisfied with their last experience of public services (Data from social audit)	Overall Status Report for Social Audit	No	The data from social audit currently does not track satisfaction; need a study to devise clear data points from the social audit reports and suggest additions on format of social audit, if required
			Number of Resolved Cases of Grievances	Government Grievance portal: CPGRAMS	No	MGNREGS is tracked in the Central Public Grievance Redress and Monitoring system; data on cases filed and resolved is not available in public domain, but may be available to MoRD
			Updation of information, and geo-tagging of works completed and in progress under MGNREGS	GeoMGNREGA website and portal	Yes	This is a feature that can be highlighted as instrument for transparency, once 100% tagging of all works – phase wise – started, under progress and completed is done
16.7 Ensure responsive, inclusive, participatory and representative decision making at all levels	<p>16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions</p> <p>16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</p>	Decentralisation and inclusive nature of decision making under MGNREGS	Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group (Extent of decentralised decision making for planning of labour budget and works in the Gram Panchayat)	Section 2.1.4 of MGNREGS Operational Guidelines, 2013	Partial	Decentralised planning and developing of labour budget is a part of the Operational Guidelines 2013; the labour budget is planned in consultation with the beneficiaries in the Gram Panchayat, to follow a systematic and participatory planning process Extent of decentralisation can be found through series of empirical studies

Cases in Perspective

Equal opportunity for women under MGNREGS

Contribution to SDGs: SDG 5.1, SDG 10.4

Data availability: Panchayat to national level

Reporting: Currently reported at HLPF

As a part of its agenda of being an instrument of inclusive growth in rural India, MGNREGS seeks to uphold the goal of protecting individuals from vulnerable groups, by providing to them a guarantee of wage employment opportunities. (Comprehensive Module July 2014)

In the FY 2017-18, 54.37% person days¹⁸ out of the total 1576.9 million person days in MGNREGS were allotted to women (MGNREGA, 2017)¹⁹, amounting to 857.3 million person days. This data has been disaggregated up to Panchayat Level, making it possible to track the incidence of women empowerment at various levels including State, District and Block. For example, the Alesur Panchayat in District Raipur of Chhattisgarh allotted 60.11% of person days in FY 2017-18 to women out of 13,762 person days of work initiated in the village.

MGNREGS boosting local economy

Contribution to SDGs: SDG 8.5, SDG 10.1

Data availability: Only through limited studies and assessments

Reporting: Currently not reported at HLPF

Goal 5 of MGNREGS aims to stimulate the local economy by providing wage employment. MGNREGA has been designed to address seasonal unemployment in the agricultural economy so as to boost the local economy in such periods.²⁰ A study of socio-economic impact of MGNREGA in 20 villages of Dungarpur district of Rajasthan (Pamecha and Sharma, 2015)²¹ revealed that MGNREGA has been successful in increasing their income by providing wage employment to rural households in the district. While 51% households that reported yearly income up to INR 25000 had admitted that MGNREGA jobs had contributed from INR 5000 to 10000 in the yearly income of their family, about 8% of the total households reported that yearly income from MGNREGA had been more than INR 10000. Furthermore, a study by Rao and Madhusudan (2013)²² conducted in two districts of Karnataka, Dharwad and Gulbarga, established the benefits of effective utilisation of labour and increased productivity, wherein about 55 per cent of the sample beneficiaries reported increased labour utilisation, while 40 per cent of the beneficiaries reported an increase in production, and 32 per cent confirmed an increase in their incomes.

¹⁸ Person-day in the context of MGNREGA is defined as one day of work. In other words, one person-day of work entitles a worker to the MGNREGA notified wage as per the Schedule of Rates (SoRs).

¹⁹ http://mnregaweb4.nic.in/netnrega/all_lv_details_dashboard_new.aspx

²⁰ MGNREGA Sameeksha II: An Anthology of Research Studies 2012-14 UNDP

²¹ <http://www.ijsrp.org/research-paper-0115/ijsrp-p3778.pdf>

²² Rao, Srinivas Kumar Alamuru and B.V. Madhusudhan (2013), Role of MGNREGA in Improving Land Productivity. Centre for Budget & Policy Studies, Bangalore, for Department of Rural Development, Government of Karnataka.

MGNREGS as means to basic needs and services of rural community

Contribution to SDGs: SDG 1.4

Data availability: Block to National level

Reporting: Currently not reported at HLPF

MGNREGS allows for convergence with schemes such as PMAY(G)²³ to provide houses for the vulnerable in rural India, allowing for tracking of data up to the block level. For example, 202 houses were constructed under the IAY in the Pouni Block of District Reasi in Jammu and Kashmir (FY 2017-18). As a part of this mission, 685974 houses were constructed for individuals from vulnerable sections in FY 2017-18.

Similarly, MGNREGS has allowed for greater financial inclusion by increasing the outreach of banking sector to MGNREGA workers for ensuring transparency and timely dissemination of wages.²⁴ Out of the 110397281 individuals registered under NREGA, 80933451 individual and 6475001 joint accounts were opened. INR 2719592.51 lakh was disseminated as wages to MGNREGS beneficiaries in FY 2017-18 through these bank accounts. (Ministry of Rural Development, 2017)

MGNREGS instrumental in providing health and sanitation services

Contribution to SDGs: SDG 2.4, SDG 6.1, SDG 6.2, 6.5

Data availability: State level

Reporting: Currently not reported at HLPF

MGNREGA, in FY 2017-18, has spent Rs. 82,902.74 lakhs to improve Rural Sanitation and Rs. 3,237.21 lakhs to provide for safe drinking water in rural areas (Ministry of Rural Development, 2017). A prime example of MGNREGS outcome in context of sanitation can be the resource convergence between MGNREGA and Nirmal Bharat Abhiyan that was operationalised by the Tamil Nadu Government in 2013 to tackle issues of poor maintenance and inadequate waste disposal. As a result, at the state level, around six lakh toilets and 11,304 compost pits were sanctioned for maintenance and waste disposal activities. Furthermore, the compost pits were utilised for converting bio-degradable waste into manure, leading to the fulfillment of SDG Goal 2 on Sustainable Agriculture (UNDP, 2015).

The case of Anantasagar village in the Warangal district of Andhra Pradesh highlights the successes of MGNREGS in providing clean drinking water in convergence with the Ministry of Drinking Water and Sanitation (Ministry of Drinking Water and Sanitation, 2007).²⁵ Under this convergence scheme, desilting of the Kothamatu Cheruvu was taken up in the year 2007. A rise of 1.8 metres in water level and increase in discharge by 110 m³/day was observed in the PWSS dug well after carrying out the work of desilting in the tank bed against the water level before start of the work (Ministry of Drinking Water and Sanitation, 2007).

²³http://mnregaweb4.nic.in/netnrega/ongo_comp_pds_wrk_rpt_new.aspx?lflag=eng&fin_year=2017-2018&source=national&labels=labels&Digest=cT/J7ChEq5LOfEr0AmsuAQ

²⁴ (MGNREGA Operational Guidelines 2013

4th ed.) http://nrega.nic.in/Circular_Archive/archive/Operational_guidelines_4thEdition_eng_2013.pdf

²⁵ <http://www.mdws.gov.in/sites/default/files/nrega-ap-rwss.pdf>



Jal Dhara Vikas initiative building climate resilience utilising MGNREGS

Contribution to SDGs: SDG 2.4, SDG 6.5, 13.1, SDG 13.2

Data availability: State level

Reporting: Currently not reported at HLPF

In the rural areas of Sikkim, the primary sources of water for agricultural and drinking water needs are mountain springs. A staggering 80% of the rural population is dependent on the springs for their daily water requirements. Artificial recharge of these springs is the primary focus of a new spring-shed development programme of the State Government, launched under the banner scheme of MGNREGA. The Dhara Vikas programme is an innovative response to frequent and intense water shortages in the state, arising as a consequence of **climate change induced erratic weather patterns**. A major outcome of the project is to enhance the water discharge in the springs and **ensure water security** in the state. This was achieved through participation from the local communities to dig percolation pits and percolation ponds in the forest land, which have been successfully demonstrated as means to increase spring discharge. As of 2013, 400 hectares of land has been covered under the spring shed development with a total investment of INR 250 lakh; resulting in an annual **ground water recharge** of 900 million litres. This has led to the revival of 50 springs and four lakes in 20 drought-prone *Gram Panchayats* in the State (MGNREGA-Dhara Vikas Programme in Sikkim Villages, 2013). The initiative, as an **agricultural production enhancer and supplementary income generation opportunity for women folk**, has multi-faceted benefits in the deprived rural areas (An Impact Assessment Study of the Usefulness and Sustainability of the Assets created under MGNREGA in Sikkim, December 2010).



Holistic benefits from MGNREGS

Contribution to SDGs: SDG 2.4, SDG 6.5, 13.1, SDG 13.2

Data availability: State level

Reporting: Currently not reported at HLPF

Choubey Sayer at Mahadebpur, which is a part of the Anara Gram Panchayat in Para Block West Bengal, is a good case study demonstrating holistic benefits from MGNREGS. Inhabitants (mostly SCs/STs) in the area are largely agriculture dependent, and subjected to erratic rainfall which adversely affects lives. Using resources from the MGNREGS and an expenditure of INR 2.38 lakhs, a barren patch of land in the village (mentioned as a pond/ Sayer in the land records) was restored as a farm pond/ *bundh* for water harvesting and supplementing irrigation in the area. Numerous social and economic benefits that arose as a consequence of the work are as listed:

- **3,326 man-days** were generated benefitting 180 families directly, and additionally provided ancillary benefits such as access to **irrigation water** to 36 families.
- About **50% of the engaged labour force were women**, who traditionally did not work outside of their houses. A resulting socio-economic betterment of the women has been noticed.
- The *bundh* provided enough water for irrigating of six acres of surrounding land, **enabling multiple-cropping and higher production yields in local agriculture**. There is evidence of some **cultivation on previously barren land**.
- A **decrease in labour-migration** has also been documented, possibly, owing to better livelihood opportunities in the area.

Action Plan for Ministry of Rural Development

Findings from the study on reporting MGNREGS's contribution to SDGs

Based on the mapping of MGNREGS contribution and indicators against SDG targets and indicators, there are gaps identified at different levels, as elaborated as following:

A. Reporting of MGNREGS contribution in achieving SDGs

At the Voluntary National Review Report on Implementations of SDGs, by India, MGNREGS contribution is acknowledged and reported for **4 Sustainable Development Goals**.

SDG 1: Ending Poverty in all forms it focuses on generating meaningful employment by developing agricultural infrastructure, productive assets and entrepreneurship-based livelihood opportunities.

SDG 5: Achieve gender equality and empower all women and girls Special focus on women in MGNREGS is acknowledged as contribution under this goal.

SDG 8: Promote sustainable economic growth, full and productive employment/work for all MGNREGS is the world's largest cash transfer programme. MGNREGS has generated over 2 billion person-days' of employment during the last year. It has helped reduce extreme poverty as well as enhance the infrastructure and purchasing power in rural areas.

SDG 10: Reduce inequalities within and among countries Special focus on employment generation and asset creation to the vulnerable rural poor, MGNREGS contributes in enhancing income of the poor.

Based on this study, MGNREGS can track its impact on **13 Goals, 27 Targets, 42 indicators**. The study identifies possible SDGs indicators that MGNREGS can track for its progress. Ministry of Rural Development should aim to increase the scope of reporting to incorporate other goals and targets where MGNREGS contribution can be acknowledged. The 13 Goals and 27 targets identified by the study include:

SDG 1 (1.1, 1.2, 1.3, 1.4), SDG 2 (2.1, 2.2, 2.4), SDG 3 (3.9), SDG 4 (4.1), SDG 5 (5.1), SDG 6 (6.1, 6.2, 6.5), SDG 8 (8.5, 8.8), SDG 9 (9.1), SDG 10 (10.1, 10.4), SDG 13 (13.1, 13.2, 13.3), SDG 14 (14.2), SDG 15 (15.1, 15.3, 15.3) and SDG 16 (16.6, 16.7)

B. Target level linkages identifications

Targets are classified under three categories in the study – direct linkages, indirect linkages and potential link. There are further studies and assessments required in order to explore, assess and validate targets under potential links with MGNREGS in order to incorporate them for tracking of the SDGs. There are 16 such targets under potential link category. These are SDG Targets 1.5, 3.5, 4.6, 6.3, 6.4, 6.6, 8.1, 8.2, 8.3, 8.7, 11.1, 12.5, 14.5, 15.4, 15.5 and 15.9.

C. Indicator level gaps

There are two nature of gaps identified at the indicator level:

Non-inclusion of UN-IAEG indicators in MoSPI list of indicators

There are 9 UN-IAEG indicators that are relevant and can be tracked by MGNREGS, but currently do not show up in the list of indicators MoSPI has identified to track for India. For India to track on these UN-IAEG indicators, it is instrumental for MoSPI to integrate these indicators; being aware of the data that can be tracked by NREGS under these indicators. These indicators are SDG 1.3.1, 3.9.2, 8.8.1, 9.1.1, 10.1.1, 10.4.1, 14.2.1, 16.6.2 and 16.7.2.

Indicators identified for tracking MGNREGS progress that are neither in UN-IAEG nor MoSPI list

In some cases, there are MGNREGS indicators identified which are neither in the UN-IAEG list of indicators nor in the MoSPI list of indicators. There is a need to explore possibilities at two fronts – identifying relevant indicators from the list of UN-IAEG/MoSPI that can replace the identified indicator; or possibilities of including these indicators in the MoSPI list of indicators. In the same regards, methodologies for these indicators have to be refurbished accordingly. There are 4 targets, 6 such indicators. These include:

- SDG 6.5** Percentage financial contribution of MGNREGS in water management and conservation works
- SDG 13.1** Climate resilient infrastructure investments under MGNREGS
Investments by MGNREGS during post disaster recovery phase
- SDG 13.3** Number of States that have integrated climate change in planning of MGNREGS activities
- SDG 16.6** Number of resolved cases of grievances under MGNREGS
Updation of information and geo-tagging of works completed and in progress under MGNREGS

D. Data gaps

There are two kinds of gaps in this case:

Indicators with partial data available

There are 15 indicators where data is partially available. There is a need to identify methodologies and processes of data collection for the identified data sets. These include 2.4, 3.9, 6.1, 6.5, 9.1, 10.1 (3 indicators), 13.1 (2 indicators), 14.2, 15.1, 15.2, 15.3, 16.7.

Indicators with no data available

There are 9 indicators where no data is available. There is a need to develop methodologies for new data and processes of data collection for the identified data sets. These indicators include 2.1, 2.2, 2.4, 4.1, 8.5, 8.8, 13.1, 16.6 (2 indicators).

Phase Wise Action Plan for Ministry of Rural Development, India

Based on the findings of the study, an action plan in three phases has been formulated. The three phases are broadly divided on the following basis:

- i. **Phase I:** Phase I of the action plan includes targets on which data and/or case studies are readily available; and that can be reported directly at the HLPF and in the Annual Report of the Ministry, 2018. Phase I also includes those targets and indicators where indicator value can be derived on an immediate basis and can be included in the reporting of MGNREGS on SDGs at HLPF and the Annual Report 2018.
- ii. **Phase II:** Phase II includes studies and assessments required for empirical data and/or derive and validate new methodologies. The purpose is to add SDG targets that can be reported under contribution by MGNREGS, after conducting required studies and assessments. By Phase II, the ministry will also have a compiled one stop for tracking all indicators relevant to the MGNREGS, contributing to SDGs.
- iii. **Phase III:** In Phase III, the ministry should comprehensively report on all the identified targets for which methodology has been devised. Pilot(s) for data collection, processes for regular updation of the required data for SDGs will be developed in Phase III. Phase III may also explore targets under potential linkages (Annex B of the study) and include them for reporting, whichever are possible.

PHASE I

The first phase as per the recommended action plan will focus on short-term implementable activities under the broad objectives stated below.

- i. **Report at HLPF on targets and indicators where data is readily available**
MGNREGS can immediately be reported on 12 indicators across 9 targets. Data for reporting on these indicators is already collected and available in the MGNREGS database. Table 2 summarises all such targets and indicators. It is also suggested that Ministry can report using case studies for targets and indicators where data is currently not appropriately available.
- ii. **Incorporate SDG targets that can be immediately reported based on identified actions**
10 SDGs targets and 11 indicators that can be immediately reported by the MoRD once the suggested actions are taken. These targets and indicators include where data is/may be available, and/or certain methodology checks can be made to collect the relevant data. Table 2 summarises these targets and indicators along with identified action to be taken.

Table 2: Report at HLPF on targets and indicators where data is readily available

Target	Indicators	Contribution
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day 1.2 By 2030, reduce at least by half the proportion of population living in poverty in all its dimensions according to national definitions	Percent of total annual budget allocated to MGNREGS Percent of total poverty alleviation budget allocated to MGNREGS	
1.3 Implement nationally appropriate social protection systems and measures for all, and by 2030 achieve substantial coverage of the poor	Population covered by MGNREGS, classified in UN-IAEG indicator categories	Roughly 19% of India's population covered. ²⁶ 20.26% SC workers and 16.36% ST workers against active workers.
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 basic services, natural resources, appropriate new technology and financial services, including micro finance	Number of accounts opened for MGNREGS wage disbursement Percent of MGNREGS wage workers financially linked to bank/post office accounts	96422874 bank and post office accounts opened.
5.1 End all forms of discrimination against all women, girls everywhere	Percent of women employed under MGNREGS	Women person days ranged from 52.82-56.15% of total from FY 2013-18. ²⁷
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	Percent of HH/ people provided with sanitation facilities	
8.5 By 2030, 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	Wages earned by male-female in regular / casual employment	
	Existence of legal protection system- equal pay for equal work	
	Employment/ social protection for persons with disabilities	0.63% of total persons who worked in FY 2017-18 were disabled ²⁸
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	Employment generated under MGNREGA	Roughly 19% of India's population covered, including women, SC/ST people, persons with disabilities ²⁹
16.6 Develop effective, accountable and transparent institutions at all levels	Updation of information and geo-tagging of completed structures on the geoMGNREGA portal	

²⁶ Calculated using total number of workers as 25.02 Crores (source: http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx) and India's population as 1.3 billion.

²⁷ http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx

²⁸ Numbers for total individuals worked and disabled persons worked taken for FY17-18 (source: http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx)

²⁹ Calculated using total number of workers as 25.02 Crores (source: http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx) and India's population as 1.3 billion.

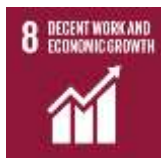


Table 3: Targets and indicators that can be reported at HLPF following given action

Target	Indicators	Action
2.4 By 2030, ensure sustainable food production systems that increase productivity & production, maintain ecosystems, that strengthen capacity for adaptation to climate change, progressively improve soil quality	Change in cropped area under irrigation due to MGNREGS	Data available is on number of irrigation related works. Collate data on number of water conservation and irrigation structures built under MGNREGS, as per size and type to derive irrigated cropped area change.
	Percent change in watershed area	Data is available on “soil and water conservation” and “drainage” related works. Need to derive data , use geo-tags to assess watershed coverage.
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	Percent of HH/ people provided with drinking water facilities	Information on rural drinking water works (convergence schemes) is available, number of people accessing facilities can be derived.
6.5 By 2030, implement integrated water resources management at all levels.	% contribution of MGNREGS under Mission Water Conservation	The contribution by MGNREGS can be derived from total expenditure on water management and conservation works (resourced directly by MGNREGS and in synergy with Mission Water Conservation).
9.1 Develop quality, reliable, sustainable and resilient infrastructure, with a focus on affordable, equitable access for all.	Proportion of the rural population who live within 2 km of an all-season road	There is data on length of roads built under MGNREGS. Need a study to derive data on increase in population with access to all-season roads built under MGNREGS.
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.	Increase in income of population enrolled in MGNREGS through Wage Employment	Data for the indicator can be derived by total wages disbursed to BPL households under MGNREGS adjusting to average income of BPL. Need a study to devise clear methodology.
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Investments by MGNREGS during post disaster recovery phase.	It also contributes to recovery by providing extra wage days in certain circumstances. Specific data on post-disaster infrastructure isn’t available yet.
13.2 Integrate climate change measures into national policies, strategies and planning	Number of States that have integrated climate change in planning of MGNREGS activities	This is currently not tracked by the Ministry, neither are state governments tracking their MGNREGS plans on SDGs. Some states, however have taken initiative of piloting climate change adaption plans under MGNREGS. A common framework needs to be developed.
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial ecosystems 15.2 By 2020, promote the implementation of sustainable management of all types of forests, increase afforestation and reforestation by [x] per cent globally	Percentage of contribution by MGNREGS to trees outside forest in total forest cover MGNREGS contribution to tree cover achieved outside forest area	Collation and aggregation of work-level data on specific works done under land development, afforestation and plantation categories. This will also require data methodology studies in order to derive the given indicator, ie, conversion of plantation done to equivalent proportion of tree cover outside forests.
15.3 By 2020, combat desertification, restore degraded land & soil, including land affected by desertification, drought & floods, and strive to achieve a land- degradation-neutral world	Total degraded land restored	The indicator can be substantiated with collation of data from work-level entries into all categories of activities permissible under land restoration works. This will help us ascertain the total area of land restored by specific works.



PHASE II

The Phase II as per the recommended action plan will focus on further adding to the targets and indicators that can be reported at HLPF. This phase will have dual objectives:

i. ***Conduct empirical studies***

There are 7 targets, 8 indicators where there is need explore co-relation between MGNREGS Goals and SDGs targets. Appropriately sample sized empirical studies can support in identifying the correlation and thereby reporting to SDGs. Table 4 elucidates empirical studies identified under this study, the list, however, is not exhaustive.

ii. ***Conduct studies to validate methodologies for data collection & deriving indicator value:***

There are 8 targets, 9 indicators where there is data available but indicator value needs to be derived using multiple data points. Studies to validate methodologies for derivation and in some cases collecting new data, as identified by this study, is summarized in Table 5.

iii. ***Develop a dashboard that tracks MGNREGS contribution to SDGs***

An e-platform at MGNREGS portal will be created where periodic data is fed on all the targets and indicators of SDGs where MGNREGS substantially contribute. This should be updated yearly with the status quo of the indicator; along with comparison with 2030 targets and relevant benchmarks.

Phase III

Phase III broadly aims to pilot and fine-tune the processes on comprehensive reporting of MGNREGS on SDGs. It will also consider any other potential linkages of MGNREGS with SDGs and possibilities of tracking the same. For this purpose, following is the action plan:

- i. Pilot data collection processes for new data that is identified to be collected from studies conducted in Phase II. Post this, phase plan for data collection in all parts of the country will be made and executed.
- ii. Build processes for regular updation of data required for SDGs from MGNREGS and use of the same in planning. Protocols of handling SDGs dashboard on MGNREGS website will be set and in running phase.
- iii. List of potential targets that can have link with MGNREGS, as identified by the study will be studied and possible qualitative and quantitative studies will be sanctioned to explore possibilities of reporting any of them to HLPF.

Table 4: List of Empirical Studies to be conducted for MGNREGS contribution to SDGs

Target	Indicator	Study
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	Prevalence of undernourishment in MGNREGS families (households)	Change in prevalence of undernourishment in families employed under MGNREGS can be found by assessing correlation between the two (Empirical studies required)
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	Prevalence of stunting in MGNREGS families (households)	Change in prevalence of stunting in families employed under MGNREGS can be found by assessing correlation between the two (Empirical studies required)
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene services)	Number of people with no access to water and sanitation facilities and the consequent link to mortality rate can be derived with empirical studies based on sampling.
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	Net Enrolment and Retention Ratio of children of MGNREGS workers in educational institutions	The possible link between retention of MGNREGS workers' children in schools and reduced migration due to decent wage employment provided by MGNREGS can be explored through empirical studies .
5.1 End all forms of discrimination against all women and girls everywhere	% of women employed under MGNREGS	There has been reduced women participation in the informal sector in the country. MGNREGS' role in providing decent work opportunities may be explored through empirical studies.
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.	Increase in income of population enrolled in MGNREGS <i>through Self-employment after the creation of Assets</i>	The Assets created are grouped into Assets that improve livelihood in rural areas. Expected increase in income due to these assets can only be derived through empirical studies .
	Increase in income of population enrolled in MGNREGS <i>who gained regular employment after Skill Enhancement</i>	Data is available on various skills programmes and initiatives under MGNREGS. However, increase in income after skill enhancement will require empirical studies to be conducted. Registered staff of MGNREGS also contributes to employment by scheme.
16.7 Ensure responsive, inclusive, participatory and representative decision making at all levels	Extent of decentralised decision making for planning of labour budget and works in the Gram Panchayat	Decentralised planning and developing of labour budget is a part of the Operational Guidelines, 2013. The labour budget is planned in consultation with the beneficiaries in the Gram Panchayat, to follow a systematic and participatory planning process. Extent of decentralisation can be found through series of empirical studies .



Table 5: List of Data Studies to be conducted for MGNREGS contribution to SDGs

Target	Indicator	Study
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, capacity for adaptation to climate change, drought, flooding, other disasters	Per cent change in forest area coverage	Number of horticulture works that involve plantation based agriculture can be tracked here. Need studies to derive such data.
8.5 By 2030, 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	Share of unemployed persons in population aged 15-24	Number of people employed for the first time in MGNREGS can be derived to trace impact of MGNREGS in reducing unemployment. Need to devise data methodology study.
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	Frequency rates of fatal, non-fatal occupational injuries, by sex and migrant status	The Operational Guidelines 2013 allow for Administrative Expenditure to ensure worksite facilities for emergency treatment of minor injuries, medical treatment and hospitalization in case of fatal injury to workers while working under the scheme. Micro data to be derived on such cases.
10.4 Adopt policies, especially wage and social protection policies, and progressively achieve greater equality	Labour share of GDP, comprising wages and social protection transfers	Data is available on total expenditure on wages under MGNREGS. Using the GDP of the country, this can be computed. Need a study to devise clear methodology.
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	Water harvesting structures built for climate resilience under MGNREGS	The water conservation infrastructure built may not have a climate resilience foundation primarily, but as a co-benefit. This link needs to be explored by studies and obtaining work-level data determining the type of structure built.
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	MGNREGS integrated climate mitigation and adaption in outreach programs	MGNREGS has an elaborate communication and outreach programme. Integrating climate change vulnerabilities and information into the outreach plans can contribute to the given indicator. This can be done by assessing the outreach module of MGNREGS at the state level. Require assessment studies.
14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	Proportion of national exclusive economic zones managed using ecosystem-based approaches	Collation and aggregation of individual work-level data on specific works done under the master-work category 'Coastal Areas' to ascertain MGNREGS' contribution to marine ecosystem conservation. This will also require data methodology studies in order to derive the given indicator.
16.6 Develop effective, accountable and transparent institutions at all levels	Proportion of population satisfied with their last experience of public services (social audit)	The data from social audit currently does not track satisfaction. Need a study to devise clear data points from the social audit reports and suggest additions on format of social audit, if required.
	No. of Resolved Cases of Grievances	MGNREGS is tracked in the Central Public Grievance Redress and Monitoring system. Data on Cases filed and resolved is not available in public domain but may be available to MoRD.



Table 6: List of targets where links with MGNREGS can be explored

SDG 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
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
4.6	By 2030, ensure that all youth and at least [x] per cent of adults, both men and women, achieve literacy and numeracy
6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and increasing recycling and safe reuse by [x] per cent globally
6.4	By 2030, 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
6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries
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
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
8.7	Take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour, eradicate forced labour and, by 2025, end child labour in all its forms, including the recruitment and use of child soldiers
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse
14.5	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information
15.4	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development
15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species
15.9	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

Goals of MGNREGS and outcome indicators

The mandate of MGNREGS is to provide at least 100 days of guaranteed wage employment in a financial year to every rural household whose adult member volunteers to do unskilled work.

MGNREGS is demand driven, wage employment programme; and resource transfer from Centre to state is based on the demand for employment in each state. MGNREGS is bottom-up, people centred, demand driven, self-selecting and rights based programme. Plans and decisions regarding the nature and choice of works to be undertaken, the order in which each worksite selection etc, are all to be made in open assemblies of the Gram Sabha (GS) and ratified by Gram Panchayat (GP). Social audit is a remarkable feature which creates accountability of performance, especially towards immediate stakeholders. MGNREGS also mark a break from the relief programmes of the past towards an integrated natural resource management and livelihood generation perspective. (Ministry of Rural Development, 2014)

The holistic design and implementation of the scheme, additionally, contributes to diverse objectives that include sustainable natural resource management to strengthen the resource base for the poor, enhance social inclusion of vulnerable groups, strengthening Panchayati Raj institutions and creation of common rural infrastructure for social good. **Core objectives** of MGNREGS include: (Ministry of Rural Development, 2014)

- Providing not less than one hundred days of unskilled manual work as a guaranteed employment in a financial year to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability;
- Strengthening the livelihood resource base of the poor;
- Proactively ensuring social inclusion and
- Strengthening Panchayati Raj Institutions

There are **eight goals** that MGNREGS has established under the scheme: (Ministry of Rural Development, 2014)

Table 7: List of Goals of MGNREGS

GOAL 1	Social protection for the most vulnerable people in rural areas by guaranteeing wage employment opportunities
GOAL 2	Enhance livelihood security of rural poor through generation of wage employment opportunities in works leading to creation of durable assets
GOAL 3	Rejuvenate natural resource base of rural areas
GOAL 4	Create a durable and productive rural asset base
GOAL 5	Stimulate local economy for providing wage employment
GOAL 6	Empowerment of the socially disadvantaged, especially, women, SCs, STs through the process of a rights based legislation
GOAL 7	Strengthen decentralized, participatory planning through convergence of various anti-poverty and livelihood initiatives
GOAL 8	Deepen democracy at grassroots by Strengthening Panchayati Raj Institutions

Permissible works that are conducted in order to achieve the eight goals of MGNREGS are classified under four categories. Cumulatively, they include total of 155 works. Broad works classified under the four categories are as follows:

Category A: Public works related to NRM

- Water conservation and water harvesting structures to augment and improve ground water like underground dykes, earthen dams, stop dams, check dams with special focus on recharging groundwater including drinking water sources.
- Watershed management works such as contour trenches, terracing, contour bunds, boulder checks, gabion structures and spring-shed development resulting in a comprehensive treatment of a watershed.
- Micro and minor irrigation works and creation, renovation and maintenance of irrigation canals and drains.
- Renovation of traditional water bodies including de-silting of irrigation tanks and other water bodies.
- Afforestation, tree plantation and horticulture in common and forest lands, road margins, canal bunds, tank foreshores and coastal belts duly providing rights to usufruct to households covered in Paragraph 5 of Schedule 1.
- Land development works in common land.

Category B: Individual Assets for Vulnerable Sections (only for Households in Paragraph 5 of Schedule I)

- Improving productivity of lands of households specified in Paragraph 5 through land development and by providing suitable infrastructure for irrigation including dug wells, farm ponds and other water harvesting structures.
- Improving livelihoods through horticulture, sericulture, plantation and forestry.
- Development of fallow or wastelands of households defined in Paragraph 5 to bring it under cultivation.
- Unskilled wage component in construction of houses sanctioned under the Indira Awas Yojana or such other state or Central Government Scheme.
- Creating infrastructure for promotion of livestock such as poultry shelter, goat shelter, piggery shelter, cattle shelter and fodder troughs for cattle.
- Creating infrastructure for promotion of fisheries such as fish drying yards, storage facilities and promotion of fisheries in seasonal water bodies on public land.

Category C: Common infrastructure for NRLM Compliant Self-help Groups

- Works for promoting productivity by creating durable infrastructure required for bio-fertilisers and post-harvest facilities including pucca storage facilities for agriculture produce.
- Common work-sheds for livelihood activities of self-help groups

Category D: Rural Infrastructure

- Rural sanitation related works, such as, individual household latrines, school toilet units, Anganwadi toilets either independently or in convergence with schemes of other Government Departments to achieve 'open defecation free' status and solid and liquid waste management as per prescribed norms.
- Providing all weather rural road connectivity to unconnected villages and to connect identified rural production centres to the existing *pucca* road network; and construction of *pucca* internal roads or streets including side drains and culverts within a village.
- Construction of playfields.
- Works for improving disaster preparedness for restoration of roads or restoration of other essential public infrastructure including flood control and protection works, providing drainage in water logged areas, deepening and repairing of flood channels, chaur renovation, construction of storm water drains for coastal protection.
- Construction of buildings for the Gram Panchayats, women self-help groups' federations, cyclone shelters, Anganwadi centres, villages *haats*, crematoria at the village or block level.
- Construction of Food Grain Storage Structures for implementing the provisions of The National Food Security Act 2013.
- Production of building material required for construction works under the Act.
- Maintenance of rural public assets created under the Act.
- Any other work which may be notified by the Central Government in consultation with the State Governments in this regard.

The table below summarises the indicators that can be measured against the eight goals of MGNREGS in order to track the progress on the identified goal. In order to map the indicators progress for the goals, the study follows these steps:

- Against each of the eight goals, parameters are defined, based from the categories of work that define the activities under the goal.
- It identifies possible indicators to track the progress on achievement of the goal. These are identified based on available indicators that MGNREGS currently tracks, as well as possible indicators, based on SDGs indicators or other relevant work to source the indicator.
- It identified data points required in order to derive the value of the indicator, along with link to the current data source for all the data points. The indicators are colour coded based on whether data is currently available, available but not sufficient and; not available.

Table 8: Summary of MGNREGS Goals, Indicators for tracking the goals and data points required and available

Goal ³⁰	Parameter ³¹	Indicator	Data points	Data Source
Goal 1 Protect the most vulnerable people living in rural India by guaranteeing wage employment opportunities.	Preference to vulnerable sections in providing wage employment. ³²	No. of People from the most vulnerable section have: - Job Cards - employed under MGNREGS	a. Vulnerable Section as per MGNREGS. b. Total vulnerable population in the country c. Total Job cards of the vulnerable groups under MGNREGS against those employed for 100 days.	a. Definition of Vulnerable Section from MGNREGS Operational Guidelines 2013, 4th Edition from the MGNREGS website. ³³ Census Population Enumeration Data. ³⁴ Source for HIV positive persons: NACO website b. Data sets for Women in Special Circumstances and Internally Displaced Persons is not available. ³⁵ c. Household Worker from MIS data on the MGNREGS website ; No. of Disabled Workers from MIS MGNREGS data ; Period Wise Employment Provided ³⁶
		Percentage of people employed under MGNREGS who belong to the vulnerable sections	a. Total individuals employed under MGNREGS b. Individuals from Vulnerable Section under MGNREGS	MIS MGNREGS Data ³⁷

³⁰ These are 8 Goals of MGNREGS

³¹ These are derived from matching permissible work categories to the Goals of MGNREGS

³² The act mandates 1/3rd of the employed under MGNREGS to be women. Each State Government is expected to should formulate a specific plan to include these special categories in MGNREGA and identify specific activities for these groups.

³³Section 9.1: SPECIAL CATEGORIES “The objective of enhancing the livelihood security of the poor households in rural areas of the country can be met only if special attention is focussed on vulnerable sections of the rural society. While providing a strong social safety net for vulnerable groups under MGNREGS, extra efforts need to be made for certain special categories of vulnerable people who will otherwise remain excluded. Some of the special categories are: i) Persons with disabilities ii) Primitive Tribal Groups iii) Nomadic Tribal Groups iv) De-notified Tribes v) Women in special circumstances vi) Senior citizens above 65 years of age vii) HIV positive persons viii) Internally displaced persons.”

³⁴ The Census Data is a Source for the Total Vulnerable Individuals constituting Persons with disabilities, Primitive Tribal Groups, Nomadic Tribal Groups, De-notified Tribes and Senior citizens above 65 years of age.

³⁵ The Data for Women in Special Circumstances and Internally displaced persons is not available as their identification and inclusion is dependent on inputs from the Gram Sabha. Section 9.2.1 of Operational Guidelines dealing with Identification states: “Since the disabled and vulnerable groups have specific needs, special efforts have to be made to include them in the programme and the POs may procure the services of State governments welfare Department / specialized resource agencies / CSOs working for the disabled/ vulnerable. The resource agencies will be responsible for assisting the Gram Sabha in identifying and mobilising the disabled and vulnerable persons, and ensuring that they get their entitlements under the Act. The cost towards the resource agencies can be met from the administrative cost. The final list of such identified disabled people and vulnerable groups will be approved by the Gram Sabha.” http://nrega.nic.in/Circular_Archive/archive/Operational_guidelines_4thEdition_eng_2013.pdf

³⁶ The two data sources classify Job holders and Work provided on the basis of Scheduled Castes, Scheduled Tribes and Women. The data set for Period-wise Employment can be used to analyze employment days within the vulnerable category. No segregated data for HIV infected individuals and Internally Displaced is available.

³⁷ Data categorized into total workers, SC, ST and Women.

Goal	Parameter	Indicator	Data points	Data Source
Goal 1 Protect the most vulnerable people living in rural India by guaranteeing wage employment opportunities.	Preference to vulnerable sections in providing wage employment. ³⁸	No. of People from the most vulnerable section have: - Job Cards - employed under MGNREGS	a. Vulnerable Section as per MGNREGS. b. Total vulnerable population in the country c. Total Job cards of the Vulnerable groups under MGNREGS against those employed for 100 days.	d. Definition of Vulnerable Section from MGNREGS Operational Guidelines 2013, 4th Edition from the MGNREGS website. ³⁹ Census Population Enumeration Data . ⁴⁰ Source for HIV positive persons: NACO website e. Data sets for Women in Special Circumstances and Internally Displaced Persons is not available. ⁴¹ f. Household Worker from MIS data on the MGNREGS website ; No. of Disabled Workers from MIS MGNREGS data ; Period Wise Employment Provided ⁴²
		Percentage of people employed under MGNREGS who belong to the vulnerable sections	a. Total individuals employed under MGNREGS b. Individuals from Vulnerable Section under MGNREGS	a. MIS MGNREGS Data ⁴³

³⁸ The act mandates 1/3rd of the employed under MGNREGS to be women. Each State Government is expected to should formulate a specific plan to include these special categories in MGNREGA and identify specific activities for these groups.

³⁹Section 9.1: SPECIAL CATEGORIES “The objective of enhancing the livelihood security of the poor households in rural areas of the country can be met only if special attention is focussed on vulnerable sections of the rural society. While providing a strong social safety net for vulnerable groups under MGNREGS, extra efforts need to be made for certain special categories of vulnerable people who will otherwise remain excluded. Some of the special categories are: i) Persons with disabilities ii) Primitive Tribal Groups iii) Nomadic Tribal Groups iv) De-notified Tribes v) Women in special circumstances vi) Senior citizens above 65 years of age vii) HIV positive persons viii) Internally displaced persons.”

⁴⁰ The Census Data is a Source for the Total Vulnerable Individuals constituting Persons with disabilities, Primitive Tribal Groups, Nomadic Tribal Groups, De-notified Tribes and Senior citizens above 65 years of age.

⁴¹ The Data for Women in Special Circumstances and Internally displaced persons is not available as their identification and inclusion is dependent on inputs from the Gram Sabha. Section 9.2.1 of Operational Guidelines dealing with Identification states: “Since the disabled and vulnerable groups have specific needs, special efforts have to be made to include them in the programme and the POs may procure the services of State governments welfare Department / specialized resource agencies / CSOs working for the disabled/ vulnerable. The resource agencies will be responsible for assisting the Gram Sabha in identifying and mobilising the disabled and vulnerable persons, and ensuring that they get their entitlements under the Act. The cost towards the resource agencies can be met from the administrative cost. The final list of such identified disabled people and vulnerable groups will be approved by the Gram Sabha.” http://nrega.nic.in/Circular_Archive/archive/Operational_guidelines_4thEdition_eng_2013.pdf

⁴² The two data sources classify Job holders and Work provided on the basis of Scheduled Castes, Scheduled Tribes and Women. The data set for Period-wise Employment can be used to analyze employment days within the vulnerable category. No segregated data for HIV infected individuals and Internally Displaced is available.

⁴³ Data categorized into total workers, SC, ST and Women.

Goal ⁴⁴	Parameter ⁴⁵	Indicator	Data points	Data Source
Goal 2 To Enhance the Livelihood Security of the Rural population through wage employment opportunity leading to creation of Durable Assets	MGNREGS contributes to livelihood security under all its work categories through three levels of intervention: <i>Wage employment, self-employment through creation of assets and; skill up-gradation.</i>	Increase in income of population enrolled in MGNREGS <i>through Wage Employment</i>	a. Poverty Line ⁴⁶ in India b. Number of BPL individuals employed under MGNREGS. c. Total wages spent on rural poor under MGNREGS.	a. Planning Commission's Report on Poverty b. Total Individuals Employed from MIS data on MGNREGS website. ⁴⁷ c. Wage data from MIS data on MGNREGS website. ⁴⁸
		Increase in income of population enrolled in MGNREGS <i>through Self-employment after the creation of Assets or Services</i>	a. No. of assets created for Individuals for self-employment b. Additional Income generated by individuals through Asset Creation.	a. MIS data on Assets Created for Vulnerable Section on MGNREGS website ⁴⁹ . b. No data on additional income through asset creation has been recorded.
		Increase in income of population enrolled in MGNREGS <i>who gained regular employment after Skill Enhancement</i>	a. No. of people who did not re-seek employment under the MGNREGS	a. This data is not currently recorded.
		Percentage of unemployed people provided jobs under MGNREGS ⁵⁰	a. Total unemployed in India b. No. of people employed through MGNREGS	1. Census of India provides data on Non-Workers/Seeking Work. 2. MIS data on Individuals Employed from MGNREGS website.

⁴⁴ These are 8 Goals of MGNREGS

⁴⁵ These are derived from matching permissible work categories to the Goals of MGNREGS

⁴⁶ Poverty Line in India is based on the monthly per capita consumption expenditure as per the Rangarajan Report on Poverty. This has been set to Rs. 972 in rural areas.

http://planningcommission.nic.in/reports/genrep/pov_rep0707.pdf

⁴⁷ The MIS data on MGNREGS website only provides data for total individuals provided with employment. It does not disaggregate individuals based on income. However, as per [MGNREGA Operational Guidelines, 2013](#), 4th Edition, the entry of registration details in NREGASoft includes the BPL status of the household (Box no. 3.2).

⁴⁸ The MIS data on MGNREGS website does not disaggregate wages for individuals based on their BPL status. However, as per [MGNREGA Operational Guidelines, 2013](#), 4th Edition, the entry of registration details in MGNREGA Soft includes the BPL status of the household (Box no. 3.2).

⁴⁹ The Assets created are grouped into Assets that: Improve productivity of lands, Improve livelihood through a. Development of fallow/waste land, b. Construction of house, c. Promotion of livestock d. Promotion of fisheries.

[http://mnregaweb4.nic.in/netnrega/master_sub_wrk_cat_dtl.aspx?type=B&head=INDIVIDUAL%20ASSETS%20FOR%20VULNERABLESECTIONS\(ONLY%20FOR%20HOUSEHOLDS%20IN%20PARAGRAPH%205\)&fin_year=2017-2018](http://mnregaweb4.nic.in/netnrega/master_sub_wrk_cat_dtl.aspx?type=B&head=INDIVIDUAL%20ASSETS%20FOR%20VULNERABLESECTIONS(ONLY%20FOR%20HOUSEHOLDS%20IN%20PARAGRAPH%205)&fin_year=2017-2018)

⁵⁰ Definition of Non-Workers as per Census: A person who did not work at all in any economically productive activity during the last one year preceding the date of enumeration was treated as non-worker. This category includes students, persons engaged in household duties, dependents, pensioners, beggars, etc. provided they were not engaged in any economically productive activity during the last one year preceding the date of enumeration. http://www.censusindia.gov.in/2011census/HLO/Metadata_Census_2011.pdf

Goal	Parameter	Indicator	Data points	Data Source
Goal 3 Rejuvenate natural resource base of rural areas	<ul style="list-style-type: none"> - Water conservation and water harvesting structures to augment and improve ground water like underground dykes, earthen dams, stop dams, check dams with special focus on recharging groundwater including drinking water sources - Watershed management works such as contour trenches, terracing, contour bunds, boulder checks, gabion structures and spring-shed development resulting in a comprehensive treatment of a watershed 	Water Quality: <ul style="list-style-type: none"> a. Increase in water availability through MGNREGS b. Degree of Integrated Water Resources Management implementation (UN indicator 6.5.1)⁵¹ c. Number of existing structures maintained through MGNREGS 	<ul style="list-style-type: none"> a. Number of Water harvesting/ conservation and irrigation structures built under MGNREGS, as per their classification⁵². b. Average capacity of the built up structures under MGNREGS (as built) c. Number of structures maintained through MGNREGS 	<ul style="list-style-type: none"> a. MGNREGS website (needs collation) b. Data not available⁵³ c. Data not available
	<ul style="list-style-type: none"> - Micro and minor irrigation works and creation, renovation and maintenance of irrigation canals and drains - Renovation of traditional water bodies including de-silting of irrigation tanks and other water bodies - Afforestation, tree plantation and horticulture in common and forest lands, road margins, canal bunds, tank foreshores and coastal belts duly providing rights to usufruct to households covered in Paragraph 5 of Schedule 1 - Land development works in common land 	Land Quality: <ul style="list-style-type: none"> a. Percent increase in tree cover b. Total degraded land restored c. Number of native species restored and planted 	<ul style="list-style-type: none"> a. Length of roads lined/maintained (3/5 years) with trees under MGNREGS b. Total degraded land restored c. Number of native species restored and planted 	<ul style="list-style-type: none"> a. Length of road lined: MGNREGS website Length of maintained: Incomplete data set⁵⁴ b. No data available⁵⁵ c. No data available⁵⁶

⁵¹ Methodology by UN Water at www.unwater.org/app/uploads/2017/05/1_Step-by-step-methodology-6-5-1_Revision-2017-01-17_Final-1.pdf

⁵² Types of conservation/harvesting structures such as earthen dam, check dam, gully plugs, stop dams, dykes, recharge pits, trenches etc.

⁵³ The data under this category is only available on expenditure on watershed works

⁵⁴ The overall category of work is Afforestation and Plantation works, but the portal tracks data specifically on roadside lined with trees and managed, which the study includes under tree cover. Any other parameter for afforestation is currently not found to be tracked.

⁵⁵ MGNREGS portal tracks overall expenditure on Land development, not specifying works and activities. This data may be available at individual works level and can be collated.

⁵⁶ Guidelines suggest planting indigenous and native species, as mentioned in the Brief Description of Works Document, MoRD

Goal	Parameter	Indicator	Data points	Data Source
Goal 4 Create a productive asset base in rural areas	Rural sanitation related works, such as, individual household latrines, school toilet, Anganwadi toilets either independently or in convergence with schemes of other Government Departments	a. Percent of HH provided with sanitation facilities b. Number of public toilets built/area	a. Percent of HH provided with sanitation facilities b. Number of public toilets built/area	MGNREGS website ⁵⁷
	Providing all weather rural road connectivity to unconnected villages and connect identified rural production centres to the existing pucca road network; construction of pucca internal roads	a. Length of roads built as per classification ⁵⁸ , through MGNREGS	a. Length of roads built as per classification, through MGNREGS	MGNREGS website
	Construction of playfields	a. Number of playfields built under MGNREGS	a. Number of playfields built under MGNREGS	MGNREGS website ⁵⁹
	Works for improving disaster preparedness for restoration of roads & essential public infrastructure including flood control and protection works.	a. No indicator identified		MGNREGS website ⁶⁰
	Construction of buildings of Gram Panchayats, women self-help groups' federations, cyclone shelters, Anganwadi centres, villages haats, crematoria at the village or block level	a. Number of common buildings constructed under MGNREGS	a. Number of common buildings constructed under MGNREGS	MGNREGS website
	Construction of Food Grain Storage Structures for implementing the provisions of The National Food Security Act 2013	a. Number of storage structures built and their capacity	a. Number of storage structures built and their capacity	MGNREGS website ⁶¹
	Production of building material for construction works under the Act	a. Total material produced	a. Total material produced	MGNREGS website ⁶²
	Maintenance of rural public assets created under the Act	a. Number of assets maintained	a. Number of assets maintained	MGNREGS website ⁶³
	Works for promoting productivity by creating durable infrastructure required for bio-fertilisers and post-harvest facilities	a. Capacity of facilities b. Amount of bio-fertiliser produced	a. Capacity of facilities b. Amount of bio-fertiliser produced	MGNREGS website ⁶⁴
	Common work-sheds for livelihood activities of self-help groups	a. Number of worksheds built	a. Number of worksheds built	MGNREGS website ⁶⁵

⁵⁷ Derive against total number of households

⁵⁸ Roads are classified under those built under PMGSY, Highways and others

⁵⁹ Data on expenditure in financial year available. (expenditure data available, assess work level data and collate)

⁶⁰ Data on work categories such as drought proofing, flood control and management, coastal areas available.

⁶¹ The data collected is on works initiated and completed under this category. Detailed break on types of storage structures built can help in deriving this point.

⁶² The data collected is on works initiated and completed under this category. Detailed break on type and amount of building material produced can help in deriving this point.

⁶³ (assess work level data and collate)

⁶⁴ (assess work level data, standard specifications for facilities and collate)

Goal	Parameter	Indicator	Data points	Data Source
Goal 5 Stimulate Local Economy for Providing Wage Employment	Investment in infrastructure is considered as the parameter of boosting the local economy. ⁶⁶	Capital Investment through MGNREGS in poor districts of the country	Capital Investment in poor districts of the country ⁶⁷	MIS MGNREGS Data
Goal 6 Empowerment of Socially Disadvantaged Groups through the Process of Rights Based Legislations	<ul style="list-style-type: none"> a. Preference Give to Socially Disadvantaged Groups in Employment provided through MGNREGS⁶⁸ b. Asset Creation for Socially Disadvantaged Groups through MGNREGS⁶⁹ c. Initiation of Grievance Redressal Mechanisms as a part of Social Audits. 	<ul style="list-style-type: none"> a. Extent of Social Audit Training and Workshops Conducted b. No. of Resolved Cases of Grievances under Grievance Redressal mechanism 	<ul style="list-style-type: none"> a. No. of Social Audit Training Conducted under MGNREGS b. No. of Social Audits conducted at GP level. 	Overall Status Report for Social Audit
Goal 7 Strengthen Decentralised, Participatory Planning through convergence of various anti-poverty and livelihood initiatives Goal 8 Deepen democracy at all grassroots by strengthening Panchayati Raj Institutions	<ul style="list-style-type: none"> a. Expanding decentralization by devolving decision making processes under MGNREGS to Gram Panchayat Level b. Convergence of Anti-poverty and Livelihood Initiatives 	<ul style="list-style-type: none"> a. Decentralised decision making⁷⁰ b. Convergence Schemes⁷¹ 	MGNREGS Operational Guidelines 2013	

⁶⁵ (assess work level data and collate)

⁶⁶ Infrastructure development through MGNREGS occurs through 4 major work activities undertaken through the scheme viz. A. Public Works Relating to Natural Resource Management B. Individual Assets for Vulnerable Sections C. Common Infrastructure for NRLM Complaint SHGs D. Rural Infrastructure. ([Comprehensive Module July, 2014](#))

⁶⁷ Wage Material Ratio: At GP level the wage-material ratio should be at 60:40. ([Comprehensive Module July, 2014](#))

⁶⁸ MGNREGS Operational Guidelines State that: Special communication strategies targeting women, small and marginal farmers, BPL families, scheduled tribes, scheduled castes and other extremely disadvantaged groups should be undertaken to ensure their greater participation in MGNREGS works. State units of Press Information Bureau, Directorate of Audio Video Publicity, Field Publicity Bureau, Song and Drama Division etc can be contacted and the services of these units can be pooled in for wider coverage of messages. (5.4.2 Operational Guideline 2013 4th edition). http://nrega.nic.in/Circular_Archive/archive/Operational_guidelines_4thEdition_eng_2013.pdf

⁶⁹ MGNREGS provides for Creation of Assets for Vulnerable Sections under the four Work Categories. ([Comprehensive Module July, 2014](#))

⁷⁰ The Act and Scheme grants powers to the State to allow for planning at State level and also devolves power to GPs to specify certain works to be initiated. Operational Guideline 2013 4th edition states that: Section 2.1.4 The GP is the pivotal body for planning and implementation. Where Part IX of the Constitution does not apply, local councils/authorities as mandated by the State concerned will be invested with corresponding responsibilities. Programme Officer (PO) is required to allot at least 50 per cent of the works in terms of cost to the GPs for implementation.

http://nrega.nic.in/Circular_Archive/archive/Operational_guidelines_4thEdition_eng_2013.pdf

⁷¹ Operational Guidelines 2013 4th ed. Provides for Possible Schemes for Convergence in Section 15.2 such as Central / State Finance Commission Grants, National Rural Livelihood Mission(NRLM), Integrated Watershed Management Programme (IWMP), Total Sanitation Programme (TSC), Backward Region Grant Fund (BRGF), Rashtriya Krishi Vikas Yojana (RKVY), RRR (Ministry of Water Resources), National Afforestation Programme (NAP), Pradhan Mantri Gramin Sadak Yojana(PMGSY), National Horticulture Mission (NHM), Schemes funded from State budget. http://nrega.nic.in/Circular_Archive/archive/Operational_guidelines_4thEdition_eng_2013.pdf

Sustainable Development Goals: Links to MGNREGS

India is among the 193 nations who signed the adoption of post 2015 development agenda and in principle aims to achieve the Sustainable Development Goals by 2030. These goals address various socio-economic and environmental outcomes from food security, basic need access of water, energy, education and food for all, good health of environment including the state of your terrestrial and water ecosystems. It also comprises of goals on economic growth, urbanisation and industrialisation to ensure these processes are in alignment to the natural and human endowments available for the well-being of people and planet. There are 17 Goals, 169 targets and more than 200 indicators finalized for tracking SDGs. The 17 Goals are:

Table 9: List of Sustainable Development Goals

SDG 1	End poverty in all its forms everywhere
SDG 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
SDG 3	Ensure healthy lives and promote well-being for all at all ages
SDG 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
SDG 5	Achieve gender equality and empower all women and girls
SDG 6	Ensure availability and sustainable management of water and sanitation for all
SDG 7	Ensure access to affordable, reliable, sustainable and modern energy for all
SDG 8	Promote sustainable economic growth, full and productive employment and decent work for all
SDG 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
SDG 10	Reduce income inequality within and among countries
SDG 11	Make cities and human settlements inclusive, safe, resilient and sustainable
SDG 12	Ensure sustainable consumption and production patterns
SDG 13	Take urgent action to combat climate change and its impacts
SDG 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
SDG 15	Protect, restore and promote sustainable use of terrestrial ecosystems
SDG 16	Promote peaceful societies for sustainable development, and accountable and inclusive institutions
SDG 17	Strengthen the means of implementation and revitalize the global partnership

The study classifies SDGs in four categories:

1. **SDGs that are directly linked with MGNREGS:** Targets of the SDGs that are aligned to overall objective of MGNREGS, as reported to Voluntary National Reporting by India.
2. **SDGs that are indirectly linked with MGNREGS:** These comprise of targets that are in the goals of MGNREGS, but currently not tracked as outcomes or impact by MGNREGS in national reporting by the MoRD.
3. **SDGs where links can be explored with MGNREGS:** These targets are those where the link can be explored but not yet established.
4. **SDGs that are not considered under the study:** These targets currently lie outside the scope of the study.

The table below classifies the SDGs and targets into the above mentioned categories along with indicators developed by UN-IAEG (Global indicators) and MoSPI (National indicators). The table also highlights the link of the target with the Goals and work categories of MGNREGS.

The key to the indicator column of the table is

Abcd	UN-IAEG Indicators
Abcd	Overlaps of National indicators + UN-IAEG indicators
Abcd	Indicators only in National list

Table 10: Category 1 of SDGs - Targets that are directly linked with MGNREGS

SDG targets		SDG Indicators		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
1.1	By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day	1.1.1	Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural) Percentage of resource allocated by the government directly to poverty reduction programme	Income and skills gained can potentially pull the identified population out of poverty	Goal 2	Category A,B,C,D
1.2	By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.1 1.2.2	Proportion of population living below the national poverty line, by sex (women) and age Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions Percentage of resource allocated by the government directly to poverty reduction programme	Income and skills gained can potentially pull the identified population out of poverty	Goal 2	Category A,B,C,D
1.3	Implement nationally appropriate social protection systems and measures for all, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1	Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable Percentage change in ST students under post matric scholarship	Employment for 100 days to the BPL - income to the BPL	Goal 2	Category A,B,C,D
5.1	End all forms of discrimination against all women and girls everywhere	5.1.1	Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex	Mandate under MGNREGS is to employ women in minimum one-third of their workforce	Goal 6	Category A,B,C,D

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	8.8.1 8.8.2	<p>Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status</p> <p>Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status</p> <p>Number/proportion of workers covered under ESI Act</p> <p>Number/proportion of workers covered under health insurance</p> <p>Accommodation in working women’s hostel</p> <p>Number of migrants workers</p> <p>Employment generated under MNREGS</p>	Labour protocols under MGNREGS	Goal 1 and Goal 6	Category A,B,C,D
10.1	By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	10.1.1	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	Increase in incomes of BPL	Goal 2	Category A,B,C,D
10.4	Adopt policies, especially scale, wage and social protection policies, and progressively achieve greater equality	10.4.1	Labour share of GDP, comprising wages and social protection transfers	Increase in labour share	Goal 6	Category A,B,C,D

Table 11: Category 2 of SDGs - Targets that are indirectly linked with MGNREGS

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
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 basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including micro finance	1.4.1 1.4.2	<p>Proportion of population living in households with access to basic services</p> <p>Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure</p> <p>No of accounts opened under PMJDY by Rural/Urban</p> <p>Balance in account (in Lacs) in a/c's opened under PMJDY</p> <p>No of a/c's with zero balance under PMJDY</p> <p>Number of beneficiaries from housing loans</p> <p>Number of beneficiaries for Bank loan for purchasing motor vehicles and other durable goods</p> <p>Number of enterprises getting loan from banks</p> <p>No of Non-Life insurance companies, insurance density and new policies issued</p>	Bank accounts opened for NREGS wage disbursements	Goal 1 and Goal 5	Category B and D
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	2.1.1 2.1.2	<p>Prevalence of undernourishment</p> <p>Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)</p>	Higher income can translate into better dietary choices	Goal 5	all
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	2.2.1 2.2.2	<p>Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age</p> <p>Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)</p>	Higher income can translate into better dietary choices	Goal 5	all

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
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 that progressively improve land and soil quality	2.4.1	<p>Proportion of agricultural area under productive and sustainable agriculture</p> <p>Percent share of expenditure in R&D in agriculture to Total GDP</p> <p>Percent change in use of modern equipments(tractor, thrasher etc)</p> <p>Percent increase of area under High Yield Variety</p> <p>Total cropped Area under Irrigation</p> <p>Total cropped Area under Rain Fed</p> <p>Percent change in Forest Area coverage</p> <p>Percent change in Watershed area</p> <p>Percent change in Rainfed area</p> <p>Percent change in Area under mangroves</p>	Sustainable agriculture and NRM are activities to be conducted under MGNREGS	Goal 3	category A
3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 3.9.2 3.9.3	<p>Mortality rate attributed to household and ambient air pollution</p> <p>Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)</p> <p>Mortality rate attributed to unintentional poisoning</p> <p>Percentage of women aged 15-49 years with a live birth in a given time period who received antenatal care, four times or more</p> <p>Percentage of children aged 12-23 months who received the three doses of pentavalent vaccine before their first birthday</p> <p>Percentage of children under 5 years of age with suspected pneumonia (cough and difficult breathing not due to a problem in the chest and a blocked nose) in two weeks preceding the survey who sought care from appropriate health facility or provider</p> <p>Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified to the national health authorities during a specified period</p> <p>Percentage of people living with HIV currently receiving ART among the detected number of adults and children living with HIV</p> <p>Percentage population in malaria-endemic areas who slept under an ITN the previous night or/and Percentage of population at risk</p>	Water and sanitation facilities due to MGNREGS construction can reduce mortality due to lack of sanitation	Goal 4	all

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
			<p>protected by IRS during a specified time period</p> <p>Percentage population using safely managed drinking water services and Percentage population using safely managed sanitation services</p> <p>Proportion of population aged 18 years and older who are currently taking antihypertensive medication among number of adults 18 years and older who are taking medication for hypertension with systolic blood pressure \geq 140 mmHg, or with distolic blood pressure \geq 90mmHg</p> <p>Age standardized prevalence of current tobacco use among persons aged 15+ years</p> <p>Number of outpatient department visit per person per year and hospital(inpatient) admission per 100 population per year</p>			
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	4.1.1	<p>Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex</p> <p>Net Enrolment Ratio (NER) at Primary/ Upper-Primary/ Secondary/ Senior Secondary levels</p>	Children able to attend school because of income option for BPL parents	Goal 1	all
6.1	By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1	Proportion of population using safely managed drinking water services	Water and sanitation infrastructure - part of MGNREGS	Goal 4	Category B and D

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
6.2	By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1	Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	Access to safe water for sanitation	Goal 1	all
6.5	By 2030, implement integrated water resources management at all levels, including through trans-boundary cooperation as appropriate	6.5.1 6.5.2	Degree of integrated water resources management implementation (0–100) Proportion of trans-boundary basin area with an operational arrangement for water cooperation Percentage of River basins brought under Integrated Water Resource Management	Water resource management under NRM in MGNREGS	Goal 3	Category A
8.5	By 2030, 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	8.5.1 8.5.2	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities Unemployment rate, by sex, age and persons with disabilities Workforce participation Ratio (WPR) of women, youth, persons with disabilities Wages earned by male-female in regular / casual employment Existence of legal protection system for equal pay for equal work Average income of workers (indicator for decent work) Employment/social protection for persons with disabilities Labour productivity growth (percentage) Annual increase in minimum real wages Share of unemployed persons in population aged 15-24	It provides competition to the wage rate in the region, to make it competitive to MGNREGS wages opportunity available to BPL	Goal 1	all

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
			(percentage) A measurement of decent work/quality of life of workers (as per Ministry's vision - to be proposed by the Ministry)			
9.1	Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	9.1.1 9.1.2	Proportion of the rural population who live within 2 km of an all-season road Passenger and freight volumes, by mode of transport	Road and infrastructure development using MGNREGS funds and labour	Goal 4	(all)
13.1	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	13.1.1 13.1.2 13.1.3	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies Number of states with strategies for enhancing adaptive capacity and dealing with climate extreme weather events.	MGNREGS building resilient infrastructure and adaptation techniques for rural population	Goal 4	(all)
13.2	Integrate climate change measures into national policies, strategies and planning	13.2.1	Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial	MGNREGS focusing on NRM and other activities for resilient building	Goal 3 and Goal 4	category A, B and D

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
			<p>update report or other)</p> <p>Pre-2020 action Achievements of pre-2020 goals as per countries' priorities</p> <p>Achievement of Nationally Determined Contribution (NDC) goals in post -2020 period.</p>			
13.3	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3.1 13.3.2	<p>Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula</p> <p>Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions</p> <p>Number of States that have integrated climate mitigation and adaptation in education curricula and outreach programs</p>			
14.2	By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	14.2.1	<p>Proportion of national exclusive economic zones managed using ecosystem-based approaches</p> <p>Percentage change in area under mangroves</p>	Managing coastal ecosystem - under MGNREGS	Goal 3	category A
15.1	By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and dry lands, in line with obligations under international agreements	15.1.1 15.1.2	<p>Forest area as a proportion of total land area</p> <p>Percentage of Tree outside forest (TOF) in total forest cover.</p> <p>Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type</p>	Afforestation & NRM - under MGNREGS	Goal 3	category A

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
15.2	By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation by [x] per cent globally	15.2.1	<p>Progress towards sustainable forest management</p> <p>Percent change in Forest Area coverage</p> <p>Total area covered under different afforestation schemes</p> <p>Total tree cover achieved outside forest area</p> <p>Number of Nagar vans and School Nurseries created.</p>	Afforestation & NRM - under MGNREGS	Goal 3	category A
15.3	By 2020, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land- degradation-neutral world	15.3.1	<p>Proportion of land that is degraded over total land area</p> <p>Percentage of restoration of degraded area</p> <p>Increasing Tree / forest cover in degraded area</p> <p>Percentage of net sown area increased.</p>	Afforestation & NRM & degraded land use - under MGNREGS	Goal 3	category A
16.6	Develop effective, accountable and transparent institutions at all levels	16.6.1 16.6.2	<p>Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)</p> <p>Proportion of population satisfied with their last experience of public services</p>		Goal 7 and Goal 8	ALL
16.7	Ensure responsive, inclusive, participatory and representative decision-making at all levels	16.7.1 16.7.2	<p>Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions</p> <p>Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group</p>		Goal 7 and Goal 8	

Table 12: Category 3 of SDGs - SDGs where linkages with MGNREGS can be explored

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
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	1.5.1 1.5.2 1.5.3 1.5.4	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population Direct economic loss attributed to disasters in relation to global gross domestic product (GDP) Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015-2030 Proportion of local governments (states) that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Disaster resilient structures	Goal 4	Category A, B, C, D
3.5	Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.5.1 3.5.2	Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	Reduction in alcohol consumption with provision of employment	Goal 1 and Goal 6	all
4.6	By 2030, ensure that all youth and at least [x] per cent of adults, both men and women, achieve literacy and numeracy	4.6.1	Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex Literacy rate of 7+ year-olds Literacy rate of Adults in the age group of 15 and above Literacy rate of youth in the age group of 15-24	Connecting literacy programmes with MGNREGS scheme enrollments	Goal 1	Category A, B, C, D
6.3	By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and increasing recycling and safe reuse by [x] per cent globally	6.3.1 6.3.2	Proportion of wastewater safely treated Proportion of bodies of water with good ambient water quality	Use of waste water - infrastructure investments	Goal 3	Category A

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
6.4	By 2030, 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	6.4.1 6.4.2	Change in water-use efficiency over time Percentage Water withdrawal (%) against water availability Level of water stress: freshwater withdrawal as a proportion of available freshwater resources Per capita storage(m3/person) Per capita availability of water (m3/person)			
6.6	By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1	Change in the extent of water-related ecosystems over time Area under over exploited blocks Percentage sewage load treated in River Ganga		Goal 3	Category A, B, D
8.1	Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	8.1.1	Annual growth rate of real GDP per capita	Change in value creation - changes in work under MGNREGS (revenue making)	Goal 5	Category A, B, C, D
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	8.2.1	Annual growth rate of real GDP per employed person Number of patent issued Software export Annual growth in manufacturing sector	Change in value creation - changes in work under MGNREGS (revenue making)	Goal 5	Category A, B, C, D
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	8.3.1	Proportion of informal employment in non-agriculture employment, by sex Coverage under ESI, EPS, NPS for decent job creation No. of MSME units registered under the online Udyog Aadhar registration for entrepreneurship No. of job created under Digital India, Swatch Bharat, Housing for all, Smart Cities etc. Number of ventures set up under Startup India (indicator	Availability of MGNREGS can reduce dependency on informal employment	Goal 5	Category A, B, C, D

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
	services		for entrepreneurship) Number of patent issued (indicator for creativity and innovation) Number/growth of micro, small and medium size enterprises Total loans sanctioned to micro, small and medium enterprise			
8.7	Take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour, eradicate forced labour and, by 2025, end child labour in all its forms, including the recruitment and use of child soldiers	8.7.1	Proportion and number of children aged 5–17 years engaged in child labour, by sex and age Total crimes relating to human trafficking Whether the country has a law against child labour Minimum age for recruitment to the armed forces Initiatives of the government towards elimination of child labour (indicator to be proposed by the Ministry of Labour)	Availability of employment option may prevent children to be sent to work	Goal 2	all
11.1	By 2030, ensure access for all to adequate, safe and aordable housing and basic services and upgrade slums	11.1.1	Proportion of urban population living in slums, informal settlements or inadequate housing Proportion of population using an improved drinking water source	Reduce forces migration with access to income	Goal 2	all
12.5	By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12.5.1	National recycling rate, tons of material recycled	MGNREGS focusing on recycling industry for job. Employment creation	Goal 5	Category B, C, D
14.5	By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	14.5.1	Coverage of protected areas in relation to marine areas	Conservation practices under MGNREGS in the region	Goal 3	category A

SDG target		SDG Indicator		Link	Associated Goal of MGNREGS	Associated work category of MGNREGS
15.4	By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	15.4.1 15.4.2	Coverage by protected areas of important sites for mountain biodiversity Mountain Green Cover Index Increase in forest / vegetative cover in mountain areas Restoration of waterbodies / streams in mountain areas Conservation of local wildlife species Improvement of local livelihoods		Goal 3	category A
15.5	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	15.5.1	Red List Index		Goal 3	category A
15.9	By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	15.9.1	Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020		Goal 3	category A

Bibliography

- Asia Development Bank Institute. (2012). *Asia's Wicked Environment Problem*. ADB.
- Donnan, S. (2014, May 9). World Bank eyes biggest global poverty line increase in decades. *The Financial Times*.
- Government of India. (2017). *Voluntary National Review Report on implementation of SDGs*.
- India Today. (2015, July 9). World Bank Report: MGNREGA becomes the world's largest public works programme. *India Today*.
- Katyal, R. (2015, August 3). India census exposes extent of poverty. *CNN*.
- MGNREGS- *At a Glance page*. (n.d.). Retrieved December 2017, from NREGA.nic.in:
http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx
- Ministry of Rural Development. (2013). *MGNREGA, 2005: Operation Guidelines*. Government of India.
- Ministry of Rural Development. (2014). *Comprehensive Module on MGNREGS*. MoRD.
- Ministry of Rural Development. (2014). *Frequently Asked Questions on MGNREGS Operational Guidelines*. MoRD.
- Ministry of Rural Development. (2017). *MNREGA Dashboard*. Retrieved December 4, 2017, from MNREGA:
http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx
- PTI. (2017, December 2017). MGNREGS effect: 11% rise in income of rural households. *The Indian Express*.
- Donnan, S. (2014, May 9). World Bank eyes biggest global poverty line increase in decades. *The Financial Times*.
- Asia Development Bank Institute. (2012). *Asia's Wicked Environment Problem*. ADB.
- Ministry of Rural Development. (2014). *Comprehensive Module on MGNREGS*. MoRD.
- Ministry of Rural Development. (2014). *Frequently Asked Questions on MGNREGS Operational Guidelines*. MoRD.
- Government of India. (2017). *Voluntary National Review Report on implementation of SDGs*.
- Katyal, R. (2015, August 3). India census exposes extent of poverty. *CNN*.
- Ministry of Rural Development. (2013). *MGNREGA, 2005: Operation Guidelines*. Government of India.
- Ministry of Rural Development. (2017). *MNREGA Dashboard*. Retrieved December 4, 2017, from MNREGA:
http://mnregaweb4.nic.in/netnrega/all_lvl_details_dashboard_new.aspx
- India Today. (2015, July 9). World Bank Report: MGNREGA becomes the world's largest public works programme. *India Today*.
- Planning Commission. (2014). *Report of the Expert Group to Review the Methodology for Measurement of Poverty*. New Delhi: Government of India.
- Office of the Registrar General & Census Commissioner. (2014). *Census of India 2011 Meta Data*. New Delhi: Office of the Registrar General & Census Commissioner.