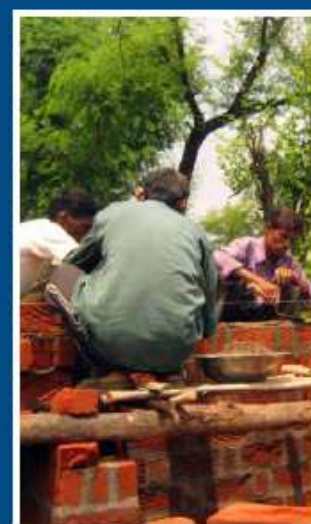


NREGA

A review of decent work and green jobs
in Kaimur District in Bihar



Acronyms

AE	Assistant Engineer
AIDS	Acquired Immune Deficiency Syndrome
APL	Above Poverty Line
BPL	Below Poverty Line
BRGF	Backward Region Grant Fund
CD Block	Community Development Block (referred to as Block)
DA	Development Alternatives
DDC	District Development Commissioner
DP	Drought Proofing
DRDA	District Rural Development Authority
DWCP	Decent Work Country Programmes
EE	Executive Engineer
FGD	Focused Group Discussion
FY	Financial Year
GHG	Green House Gases
GJ	Green Jobs
GoB	Government of Bihar
GoI	Government of India
GP	Gram Panchayat
HH	Households
HIV	Human Immunodeficiency Virus
IAY	Indira Awaas Yojana
IC	Irrigation Channels

ICDS	Integrated Child Development Scheme
IF-SC/ST	Irrigation Facility to Scheduled Caste/Scheduled Tribe Families
ILO	International Labour Organisation
INR	Indian Rupees
IOE	International Organisation of Employers
ITUC	International Trade Union Confederation
JE	Junior Engineer
LD	Land Development
M & E	Monitoring and Evaluation
MIS	Management Information Systems
NAPCC	National Action Plan on Climate Change
NREGA	National Rural Employment Guarantee Act
NREGS	National Rural Employment Guarantee Scheme
OHS	Occupational Health and Safety
PD	Project Director
PHC/CHC	Primary Health Centre/Community Health Centre
PO	Programme Officer
PRI	Panchayati Raj Institutions
PRS	Panchayat Rozgar Sewak
PS	Panchayat Samiti
PTA	Panchayat Technical Assistant
RC	Rural Connectivity
RTWS	Renovation of Traditional Water Harvesting Structures
SC	Scheduled Caste
ST	Scheduled Tribe
TSC	Total Sanitation Campaign
UNEP	United Nations Environment Programme

WCH	Water Conservation and Harvesting
ZP	Zilla Parishad
PwD	People with Disabilities
MI	Micro Irrigation
CBO	Community based organisation
SHG	Self help group
DM	District Magistrate
EIA	Environment Impact Assessment
IFMC	Integrated Finance Management Cell
RDD	Rural Development Department
JFMC	Joint Forest Management Committee

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We welcome feedback on this report from anyone who reads it.

Kiran Sharma
Team Leader

Raghwesh Ranjan
Principal Investigator

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ABBREVIATIONS

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BACKGROUND

OF THE STUDY



Context

About National Rural Employment Guarantee Scheme (NREGS)

The National Rural Employment Guarantee Scheme (NREGS) has been devised as a public work programme to address the issue of a rights-based approach to development; provide income security to rural households through guaranteed wage employment; reduce/check distress migration from the rural to urban areas and create durable community assets (in the rural areas) to trigger an overall development of about six lakh Indian villages.

- **Socio-economic Context**

The jobless growth of the 1990s, stagnation or even decline in the growth of agricultural productivity, suicides by distressed farmers in various parts of the country and increased migration from the rural to urban areas were the larger socio-economic context of the National Rural Employment Guarantee Act (NREGA). Voting out of the “India Shining” slogan and some icons of economic reforms in the 2004 Parliamentary and Assembly elections formed the immediate political context of the Act¹. It was also an attempt to moderate the consequences of economic reforms, which have increased income and regional inequality in the reform phase².

There is a constitutional context as well. Article 41 of the Indian Constitution provides a non-justiciable right to work under the Directive Principles of State Policy and proclaims: “The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work in case of unemployment”³. This Article remained dormant for fifty-five years until the legislation of the NREGA in 2005. However, the NREGA is a partial fulfilment of the right to work, as it assures employment at the household and not at the individual level and guarantees a maximum of 100 days of wage employment. Nevertheless, it is a landmark development in the sense that it highlights the confidence of the state in its economic capacity to convert non-justiciable rights provided in Part IV of the Indian Constitution into justiciable ones.

The NREGA was passed by the Parliament of India in its monsoon session of 2005. The Act received the assent of the President on September 5, 2005 and was notified in the Gazette of India on September 7, 2005. It came into force in 200 selected (backward) districts of the country on February 2, 2006 and was extended to 130 more districts from April 1, 2007 onwards. It has since been extended to all the districts from April 1, 2008, advancing its universal coverage by three years, a bold step indeed.

¹ See Ashok K. Pankaj, ‘NREGA: Guaranteeing the Right to Livelihood’, in *India Social Development Report 2008* (Delhi: Oxford University Press, 2008), pp. 221-23.

² See M.S. Ahluwalia (2000), ‘Economic Performance of States in Post-Reforms Period’, *Economic and Political Weekly*, Vol. XXXV, No. 19, pp. 1637-48; N.J. Kurian (2000), ‘Widening Regional Disparities in India’, *Economic and Political Weekly*, Vol. XXXV, No. 7, pp. 538-50; Angus Deaton and Jean Dreze (2002), ‘Poverty and Inequality in India: A Re-examination’, *Economic and Political Weekly*, Vol. 37, No. 36, pp. 3729-48; Nirvikar Singh, Lavesh Bhandari, *et al.* (2003), ‘Regional Inequality in India: A Fresh Look’, *Economic and Political Weekly*, Vol. 38 No. 1, pp. 1069-73; Sabyasachi Kar and S. Saktivel (2007), ‘Reforms and Regional Inequality in India’, *Economic and Political Weekly*, Vol. 42, No. 47, pp. 69-77.

³ V.N. Shukla, *The Constitution of India* (Lucknow: Eastern Law Company, 2004), p. 305.



- **Objectives of the Scheme**

The main objective of the Act is: “To provide for the enhancement of livelihood security of the households in rural areas by providing at least 100 days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work”⁴.

Other objectives include:

- Reduction of distress migration from rural to urban and from one part of rural to another rural area;
- Creation of durable assets in villages;
- Invigoration of civic and community life and enlivening of Panchayati Raj Institutions (PRIs), as they have been entrusted to formulate, implement and monitor the scheme;
- Empowerment of rural women by providing them the opportunity to earn income independently and participate in social groups (workers);
- Overall development of the rural economy;
- Promotion of inclusive growth and development; and
- Facilitation of multiplier effects on the economy.

The categories of works permissible under NREGS are those of Water Conservation, Drought Proofing (including plantation and afforestation), Flood Protection, Land Development, Minor Irrigation, Horticulture and Land Development on the land owned by SC/ST/ -BPL/IAY and land reform beneficiaries and Rural Connectivity.

The Green Jobs Initiative and NREGS

The Green Jobs Initiative formulated in 2007 is a joint initiative by the United Nations Environment Programme (UNEP), the International Labour Organisation (ILO), the International Employers Organisation (IOE) and the International Trade Union Confederation (ITUC). The initiative was launched to mobilise governments, employers and workers to engage in a dialogue on coherent policies and effective programmes, leading to a green economy with green jobs and Decent Work for all.

Green Jobs can be generically defined as the direct employment created in economic sectors and activities, which reduce their environmental impact and ultimately bring it down to levels that are sustainable. Green Jobs are Decent Jobs that contribute to environmental sustainability. These jobs can be found in all economic sectors and help protect ecosystems and biodiversity; reduce the need for energy and natural resources, such as materials and water; de-carbonise the economy and minimise all forms of waste and pollution. Green Jobs are therefore directly related to climate change mitigation and adaptation activities and also to other environmental

⁴ Gazette of India, Extraordinary, Part II, No. 48, Delhi, September 7, 2006, p.1.

issues, such as natural risk management, biodiversity conservation, prevention of desertification, pollution control and prevention, etc. Climate Change and climate variability have a major socio-economic impact, in particular in countries, which rely largely on environment-based income and livelihood. For these reasons, responses to climate change need to be mainstreamed into national, sectoral and local development strategies. The ILO constituents and the ILO (as an office) should play an important role at the international and national levels in a system-wide approach, including through the development of the Decent Work Country Programmes (DWCP).

Jobs created under the employment intensive environmentally sustainable public programmes, such as the NREGA, would in principle fall under the definition of Green Jobs, should these jobs be considered decent and the contribution of these programmes to reducing the environmental impact or maintaining the environmental capital be demonstrated. By definition, such programmes have an economic and social function, which are linked to the broader sustainable development agenda. The Government of India (GoI) has an active policy in support of sustainable development, which includes the adopted National Action Plan on Climate Change (NAPCC). The GoI has also constituted a Task Force to deal with the employment issues relating to Climate Change and Green Jobs. The choice of works executed under NREGA fits well into the green jobs initiative as majority of its work contributes to development/regeneration of water bodies, bio-mass. The focus on Natural Resource Management is already built into the National Rural Employment Guarantee Scheme (NREGS), through the high priority on work related to land development, water conservation and micro irrigation. The new ILO initiative on green jobs would further support the national effort towards promoting sustainable cultivation practices and livelihood opportunities in natural resource management, while leading to a more sustainable environment at the local level through the NREGS.

The Sub-Group constituted by the GoI's Task Force on Climate Change and Green Jobs in its meeting held on 31st August, 2009 suggested a more detailed review of the type of jobs created under the NREGS, in particular their social and environmental dimensions, as well as development of a systematic approach in identifying those 'green jobs' under the NREGS in different sectors such as:

- Food production and agriculture
- Rehabilitation and maintenance of rural infrastructure
- Natural resource management (forests and fisheries)
- Alternative energy and energy efficiency
- Construction and irrigation, watershed development and rural access

By using the same methodology, the study should also assist in identifying those jobs (and actions) which are seen as contributing to environmental degradation. By furthering this analytical work, one could aim at the development of a model for assessing the employment profile of those green sectors, contributing to environmental outcomes and potential for job creation.



This is the context in which ILO commissioned Development Alternatives (DA) to undertake this study. ILO has been working with DA on several assessment projects, pertaining to Green Jobs, Decent Work Agenda and Skill mapping in prominent sectors in India. DA's previous experience in diverse facets of NREGS in Bihar, Uttar Pradesh and Madhya Pradesh was considered an asset for the undertaking of this study, which required a fairly thorough understanding, both of the operational modalities of the Act, as well as the Green Jobs concept. The study, it was agreed, will be undertaken in the state of Bihar only.

Objectives of the Study

The main objective of the study was to assess the Decent Work and environmental dimensions of the existing jobs created under NREGS in one particular district, with a view to promoting Green Jobs through the creation of new jobs and the enhancement of existing jobs. In this context, the specific objectives of the study were:

- To develop a systematic approach for identifying and reviewing the Decent Work and environmental dimensions of existing jobs under NREGS
- To apply this methodology to existing jobs under NREGS in several areas in the State of Bihar, through field research and analysis;
- To make recommendations for the further enhancement of the Decent Work and environmental dimensions of existing and future jobs under NREGS, including skills development,
- To review the usefulness of developing a systematic approach for monitoring the creation of green job under NREGS and other national programmes

Scope of the Study

By using the criteria of soil characterisation, rainfall, temperature and terrain, three main agro-climatic zones have been identified in the state of Bihar- Zone-I (North West Alluvial Plain), Zone-II (North East Alluvial Plain), Zone-III (South Bihar Plain), each with its own unique prospects (*Table 1*).

Agro Zone	Climatic	Districts	Area (,000 ha)	Average Rainfall (mm)	Soil Topography and	Main Crops
Zone –I North West Alluvial Plains		Bettiah, Motihari, Gopalganj, Siwan, Vaishali, Seohar, Muzaffarpur, Samastipur, Sitamarhi, Madhubani, Darbhanga, West & East Champaran	Net Cultivated - 2281 Gross Cultivated - 3260	1234.7	Medium acidic, heavy textured, sandy loam to clayed, flood prone. (Large area remains under water	Rice, Wheat, Maize, Arhar Horticultural Crops -Litchi, Mango, Makhana, Water Chestnut

Table 1: Agro- climatic Zones of Bihar						
Agro Zone	Climatic	Districts	Area (,000 ha)	Average Rainfall (mm)	Soil Topography and	Main Crops
					called Chaur, Maun & Tal lands)	
Zone – II North East Alluvial Plains		Purnea, Katihar, Saharsa, Madhepura, Araria, Kishanganj, Supaul, Khagaria, Begusarai	Net Cultivated– 1147 Gross cultivated 1677	1382.2	Light to medium textured, slightly acidic, sandy to silty loam. (Large area comprise Tal and Diara lands)	Maize, Mustard, Jute, Sugarcane Horticultural Crops Mango, Bel, Banana, Papaya, Cucurbit, Chilly, Turmeric, Potato– Rice, Gram, Wheat Horticultural Crops Mango, Guava, Banana, Bael, Jackfruit, Onion, Potato, Chillies, Marigold
Zone – III South Bihar Alluvial Plains		Patna, Gaya, Buxar, Jehanabad, Nawada, Nalanda, Rohtas, Bhojpur, Aurangabad, Kaimur , Banka, Munger, Jamui, Lakhisarai, Shekhpura, Bhagalpur	Net Cultivated - 241 Gross Cultivated - 3408	1102.1	Old alluvial to sandy loam.	

Source: <http://krishi.bih.nic.in/pdf/zones.pdf>

The study was conducted between October and December 2009 in the district of Kaimur with facilitation of International Labour Organisation (ILO) and the Government of Bihar (GoB).

MATERIAL

AND METHOD



Rationale for Selection of the Study Area

Bihar, a predominantly agricultural state, with plenty of plain and fertile land with alluvium soil and abundance of water courses and groundwater, continues to remain economically backward. Floods and droughts are regular features of the state, notwithstanding significant developments in water resource management, including measures for flood prevention and control and the development of irrigation systems.

Bihar accounts for 16.5 per cent of the flood-prone area and 22.1 per cent of the flood-affected population of India. The rivers that regularly inundate the plains are the Ganga, Kosi, Gandak and Son.



In south and central Bihar, drought situations are well documented. In September 1988, when the whole of north Bihar was flooded, south and central Bihar was suffering from severe drought. The great famine of Bihar is still well within memory. During that year, Purnia was the only district, out of the 38 districts in Bihar that received nearly normal rainfall. Districts like Buxar, Bhojpur, Kaimur, Aurangabad, Samastipur, Khagaria and Begusarai received almost negligible rains.

In this backdrop, it should have been logical to undertake the study in two districts, representing the diverse contexts of Bihar i.e. flood and drought. However, for a green jobs perspective, it has been felt important to be able to identify a district which could offer the widest range of possible types of work and activities under NREGS. Considering the experience and information obtained on droughts and floods in the Kaimur and Kishanganj districts as a part of a recently concluded scoping study on NREGS, the district of Kaimur was selected for the purpose of this particular study.

Profile of Kaimur District

History: The present district of Kaimur was a part of Shahabad district till 1972, after which it became a part of Rohtas district. It was in 1992 that Kaimur emerged as an independent district in the state of Bihar.

Area: Kaimur district encompasses an area of 335501 hectares of which 54 per cent is used for agriculture and 31 per cent is under forest. Area not fit for cultivation is 11 per cent of the total area of the district, where as the remaining four per cent of the area is designated as culturable waste land. 73 per cent of the land under cultivation is irrigated. The main source of irrigation is canal irrigation that accounts for 50 per cent of the irrigated area in the district. The other sources of irrigation include wells (including tube wells 31 per cent), tanks and lakes (5 per cent), rivers and water falls (one per cent) and other sources (13 per cent).



Geography: Geographically, Kaimur can be divided into two parts (i) hilly area and (ii) plain area. The hilly area comprises the Kaimur plateau. The plain area on the western side is flanked by the rivers Karmanasha and Durgawati. The Kudra river lies on its eastern side. The districts of Buxar (Bihar) and Ghazipur (Uttar Pradesh) bound it on the North. On the south is the district of Garhwa (Jharkhand) and on the West is the district of Chandauli and Mirzapur (Uttar Pradesh). On the East is district Rohtas (Bihar).

Climate: The climate of the district is somewhat extreme in nature, i.e., quite hot during the summer and fairly cold during the winter. January is the coldest month when the mean minimum temperature comes down to approximately 40°C. The temperature starts rising from March and reaches its peak in May, when the mercury touches about 45°C. Rain starts sometime in mid-June and lasts till mid-September. The district gets easterly winds from June to September and from October to May, the wind direction reverses. Maximum rains occur during the months of July and August (289 mm). Sometimes winter rains occur in January-February.

River System: Originating from Kaimur hills, river Karmanasha passes through Mirzapur district of Uttar Pradesh and forms the western boundary of the district for about 170 km. River Kudra, which forms the eastern boundary, separating Rohtas district, is a branch of river Dhoba rising in Kaimur Plateau, South-West of Tilauthu and ultimately joins river Karmanasha. River Durgawati originates from Kaimur hills and flows in the northern direction. It is joined by the Kudra River before it merges finally into Karmanasha. Durgawati is perennial in nature and inundates a large area of land during heavy rains.

Population: Kaimur has a population of 12.47 lakh persons of which 97 per cent reside in the rural areas. The only urban area of the district is the district headquarters, Bhabua, which accounts for three per cent of the urban population of the district. Scheduled castes comprise 22 per cent of the district's population and scheduled tribes comprise three per cent. The average household size in Kaimur is seven.

Table 2: Demography and other important Social Indicators

<i>Parameters</i>	<i>Kaimur</i>
<i>Population (Lakh)</i>	12.47
<i>Pop Density (per Sq Km)</i>	382
<i>Pop Growth Rate (1991-2001)</i>	30.64%
<i>Sex Ratio</i>	940
<i>% of SC pop to total pop</i>	22.21
<i>% of ST pop to total pop</i>	2.77
<i>Literacy (Male)</i>	70.57%
<i>Literacy (Female)</i>	39.90%

Working Population: Kaimur has a rural working population of 66 per cent, out of which 70 per cent are main workers. Among the main workers, 39 per cent are cultivators and 44 per cent are agricultural labourers. A small proportion of three per cent is engaged in household industry and 11 per cent are engaged in other activities. Among the marginal workers in rural areas, 62 per cent are engaged as agricultural labourers and 25 per cent as cultivators.

Literacy: Kaimur has a literacy rate of 44 per cent with a gender literacy gap of 31 per cent. Male literacy rate is 70 per cent and female literacy rate is 39 per cent. One of the major reasons for the low level of literacy is the lack of educational infrastructure in the district. According to the 2001 census, one primary school caters to 321 children (below the age of six years). In 2001, 21 per cent of the villages in the district had no education facility.

Infrastructure and Facility: There is one hospital available for every 5955 persons in the district. There is one post office for 1440 and one bank for every 2881 rural households in the district.



Status of NREGS in Kaimur District

The total number of rural households in Kaimur district, as per 2001 census, was 178,669 and average household size was seven. There were 203,280 job card holders in Kaimur district as on October 2009. Till the end of October 2009, only 26,507 HHs were provided jobs and 562,000 person-days were generated in the district in which the share of women was 29.88 per cent. Cumulative number of households that completed 100 days of employment during the running FY as of now is two. Therefore, it can be inferred that Kaimur is yet to achieve significant milestones as far as NREGS is concerned. The outreach of NREGS is limited to almost 14 per cent of the total rural households in the district and the resource projections are under-estimated.

The current scenario (as on 16 December 2009) of NREGS in Kaimur district against the state of Bihar has been summarised in Table 3.

Table 3: Status of NREGS : Bihar vs. Kaimur

	Kaimur (0.26507 lakh HHs)	Bihar (27.11177 lakh HHs)
<i>Person-days (in lakhs)</i>		
<i>Total</i>	5.62	684.96
<i>SCs</i>	3 [53.4%]	331.49 [48.4%]
<i>STs</i>	0.39 [6.99%]	14.9 [2.18%]
<i>Women</i>	1.68 [29.88%]	192.01 [28.03%]
<i>Others</i>	2.23 [39.61%]	338.57 [49.43%]
<i>Total Fund (INR)</i>	7.34 Crore	1598.7 Crore
<i>Expenditure</i>	3.57 Crore	1025.24 Crore
<i>Total works</i>	1371	126542
<i>Works completed</i>	409	43198
<i>Works in progress</i>	962	83344

Dimensions of the Study: Material and Method

Setting Indicators for Decent Work and Environmental Sustainability

The NREGS-created jobs, worksite conditions and social security provisions were important parameters used to review the four pillars of Decent Work (productive and secure employment, social protection, rights and social dialogue). On the other hand, the main parameters to review the environmental sustainability of the jobs concerned were:

- Contribution to Greenhouse Gas (GHG) emissions reduction or increase of capture capacity:** Jobs that contribute to reducing the emission of GHG or to increasing GHG capture capacity e.g. afforestation works.
- Protection of ecosystems and development of the capacity for eco-system services:** Jobs that contribute to preserving or restoring eco-systems and improve services such as water management and conservation, land use planning and management etc.
- Energy efficiency and alternative sources of energy:** Jobs that promote an efficient use of energy and a low dependence on fossil fuel.

- d. **Resource efficiency:** Jobs that require limited use of natural resources and materials, such as water, wood, construction material, etc.
- e. **Environmentally sound management of waste, including minimisation and recycling:** Jobs that help minimise the generation of waste and manage them in an environmentally sound manner.

The Decent Work concept, as defined by ILO, is based on a set of indicators that can be categorised under the fields of employment, social protection, rights at work and social dialogue respectively. Environmental sustainability is measured against performance in various environmental fields. Advance methodologies to measure the environmental impacts of sectors, activities and jobs rely on the concomitant use of such tools as comprehensive Environmental Impact Assessments (EIA) for processes and products and Strategic Environment Assessments (SEA) for sectors and activities. For the sake of being able to apply a user-friendly and quick methodology, a limited number of environmental indicators have been prioritised in the context of the present study (Table 4). Taking into account the fact that the concept of “Green Jobs” is inclusive of both its social/labour dimension, as well as its environmental dimension, it was well understood that not all environmentally sustainable jobs would be decent and not all decent jobs would be environmentally sustainable. The review of the social and environmental indicators that would help review existing jobs and activities and identify green jobs would therefore require a combined approach.

Table 4: Decent Work and Environmental Sustainability Indicators	
<i>Decent Work indicators</i>	<i>Environment Sustainability Indicators</i>
Employment Related <ul style="list-style-type: none"> – Total employment generated – Women’s participation rate – Category of labour (socio-economic, gender disaggregated) – Minimum wage realisation and timely payments – Days of employment available Social Protection Related <ul style="list-style-type: none"> – Insurance Coverage Ratio (Insured against Uninsured among job card holders) – Reported occupational injuries – Provisions for rest and related worksite facilities – Usage of PPEs at workplace and other occupational health and safety practices Social Dialogue Related <ul style="list-style-type: none"> – Presence of labour groups – Participation in planning – Availability and awareness on grievance redressal system – Number of grievances lodged (with their nature) – Awareness programmes on HIV/AIDS for workers (numbers) – Awareness programmes on OHS for workers (numbers) 	Works that support <ul style="list-style-type: none"> – Protection of ecosystems and development of the capacity for ecosystem services – Energy efficiency or reliance on renewable sources of energy – Resource efficiency – Reduction in GHG emission or increase of GHG capture capacity – Environmentally sound management of waste.

Rights Related <ul style="list-style-type: none"> – Incidences of child labour – Hours of work and its distribution considering seasonal conditions – Discriminatory engagement incidences against total works being undertaken (with nature of discrimination and reasons thereof) – Proportion of women workers to total workers 	
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Consultation and Consensus Seeking with Stakeholder Groups

The developed indicator list was shared with diverse stakeholder groups - interface with the Principal Secretary, Rural Development Department, GoB and then through consultation workshop at Kaimur with NREGS functionaries and relevant line department representatives and consensus was sought. The inputs received were incorporated for the purpose of revising the indicator list.

Secondary Data Collection

Secondary data was collected through different sources at different levels:

Table 5: Source of Secondary Information at Different Levels	
Level	Source
<i>State Level</i>	<ol style="list-style-type: none"> 1. NREGS cell in Rural Development Department, GoB 2. Web portal (www.nrega.nic.in) 3. Census of India, 2001 – Village Directory of Kaimur district Part A and B
<i>District Level</i>	<ol style="list-style-type: none"> 1. District NREGS Cell 2. Vanvasi Krishi Vigyan Kendra, Adhaura, Kaimur
<i>Block Level</i>	<ol style="list-style-type: none"> 1. MIS wing at Block level

Primary Information Collection

For the purpose of collection of primary data, two Community Development Blocks, against the proposed one, of Adhaura and Durgawati was selected. The selection of blocks was done with the consensus of the state and the district level officials. The two CD blocks were representatives of different contexts within the district of Kaimur. Adhaura was the representative of hilly terrain with forest inhabited predominantly by tribes and known for Naxal infestation, while Durgawati was the representative of plain and multi-ethnic composition.

• Worksite Observation

Worksite observation was carried out at six locations. Due to the agricultural season resulting in low availability of labour, coupled with non-realisation of fund at district level, very few worksites were operational. Therefore, the six worksites were selected either because they were open or had recently been

concluded, irrespective of their location within the district. The worksite observation was carried out, using the Worksite Observation Checklist (*Annex 1*).

Focus Groups Discussions (FGDs) with Workers

Six semi-structured FGDs were carried out during the course of the study. Checklist (*Annex 2*).

- **Interface with Community Development Block⁵ Level Officials**

Interface was held with the Programme Officer (PO) of NREGS, Junior Engineer, Computer Operator, Accountant and Panchayat Rozgar Sewak (PRS) at Adhoura and Durgawati, using semi-structured checklist (*Annexe 3*).

- **Interface with District Level Officials**

Interface was held with the Deputy District Programme Coordinator cum Deputy Development Commissioner and officials at NREGS cell, using semi-structured checklist (*Annex 4*). Apart from this, relevant line department officials – Agriculture Development Officer, Divisional Forest Officer and Ranger, District Horticulture Officer, Project Director – DRDA were also consulted.

⁵ Community Development Block is a district sub-division.



Processes Adopted

The processes adopted for undertaking various activities can be summarised as follows:

Table 6: Process Matrix				
Major Areas of Work	Process Details	Levels of Community Participation	Facilitating and Constraining Factors	Human Resource Deployment and Time
<i>Development of protocols and sharing with ILO</i>	<ol style="list-style-type: none"> 1. The protocols were developed in tandem with the proposed methodology in the proposal 2. They were developed to collect information – perspective based from supply and demand side representatives; and observation based by the investigators 3. The draft protocols were shared with ILO and the inputs were integrated 	N. A.	<ol style="list-style-type: none"> 1. Strong team composition – trans-disciplinary team comprising of social scientist, statistician, agriculturist, civil engineer and monitoring and evaluation expert 2. Flexibility and quick feedbacks from ILO 3. Thorough and comprehensive proposal, which was a result of intensive interaction between DA and ILO 	A team of 5 researchers for 7 days
<i>Creating ownership of state Government</i>	<ol style="list-style-type: none"> 1. Individual interaction with Principal Secretary, Rural Development Department, Govt of Bihar with sharing of the copy of the proposal. 2. The RDD issued formal directives to the District Administration of Kaimur for lending support and facilitation to the study team. 3. The recommendation of PS, RDD regarding selection of 	N.A.	<ol style="list-style-type: none"> 1. Strong past rapport of DA with the state level machinery and working with RDD, GoB on NREGS-related researches. 2. Genuine interest of the State Government on innovative researches in flagship programmes including NREGS 	2 team members for 7 days – meeting with PS, RDD, GoB and follow up on issuance of directives to the District Administration

Table 6: Process Matrix				
Major Areas of Work	Process Details	Levels of Community Participation	Facilitating and Constraining Factors	Human Resource Deployment and Time
	block in Kaimur for field work incorporated in the work plan.			
<i>Creating strong buy-in at District Level</i>	<ol style="list-style-type: none"> 1. Meeting with the District Project Coordinator (NREGS) and DM and the Deputy District Coordinator (NREGS) and DDC at District Level and sharing of copy of the proposal. 2. Intensive meeting and tele-conversations with DM and DDC for finalisation of dates for stakeholder consultation workshop and ensuring participation of all concerned stakeholders. 	N.A.	<ol style="list-style-type: none"> 1. The facilitating factor was the earlier work on NREGS done by DA in Kaimur and strong rapport with the DM 2. The constraining factor was change of DDC and building rapport with him. 	1 team member for 5 days
<i>Stakeholder Consultation Workshop</i>	<ol style="list-style-type: none"> 1. Mutual decision on date and venue of the workshop between DA and the District Administration 2. Creation of project memory at the district level – a file in name of Green Jobs Initiative under NREGS by DA has been created 3. The workshop was co-hosted by the District Administration and DA and prior invites to all the concerned stakeholders were issued by the DM. 4. Sharing the purpose, intent, outputs and advantages to 	N.A.	<p>Facilitating factors: Support extended by the district administration, Seriousness shown by the State Government</p> <p>Constraining factors: Time constraint and diversity in portfolio of participants</p>	5 team members for 2 days

Table 6: Process Matrix				
Major Areas of Work	Process Details	Levels of Community Participation	Facilitating and Constraining Factors	Human Resource Deployment and Time
	<p>the District to all stakeholders maintaining utmost transparency and mutual respect</p> <ol style="list-style-type: none"> Selection of two blocks for field work (against one proposed in the proposal) viz. Adhoura (suggested by PS, RDD, GoB) and Durgawati. Inputs to the indicators and thereby its finalisation vetted by local stakeholders. Proceedings of the workshop shared with ILO 			
Internal review and finalisation of indicators	<ol style="list-style-type: none"> Based on inputs received at the stakeholder consultation workshop the indicator set was revised and finalised Each indicator was then split into one or two questions that yield information and provide clues for data requirements. Each question was then split into scale of three possible options and was ranked as 1 – 3. Weightage was assigned to different options as answers to the questions pertaining to each indicator. 	N.A.	Facilitating factors: Strong team composition with an understanding of NREGS, environment, Decent Work and research methodology.	5 team members for 3 days

Table 6: Process Matrix				
Major Areas of Work	Process Details	Levels of Community Participation	Facilitating and Constraining Factors	Human Resource Deployment and Time
Collection of secondary information – at state level	<ol style="list-style-type: none"> 1. With thorough understanding of data requirements, a checklist of secondary information was developed. 2. All the works carried out in the district of Kaimur for FY 2009-10, 2008-09 and 2007-08 was collected from the state 3. However, the data sets for FY 2008-09 and 2009-10 was found to be more comprehensive and updated and thus are major parts of further interpretation and analysis. 	N.A.	<p>Facilitating factors: Previous working relationship with Sunai Consultancy, Patna as a part of previous studies on NREGS by DA. Thus, one team member from Sunai was engaged for the purpose of procuring secondary data from State Government at Patna. Strong rapport at State Level resulted in access to all secondary information available with the State NREGS Cell.</p> <p>Constraining factors Bihar underwent significant changes in administrative set up from management and operation of NREGS. Since, 2008 new set up of contractual staff was engaged for management and operation of NREGS works in the state and at district level. Before that it was implemented through formal government machinery and the information was not updated. This was a hindrance in accessing information within the allocated time for the project.</p>	2 team members for 10 days.

Table 6: Process Matrix				
Major Areas of Work	Process Details	Levels of Community Participation	Facilitating and Constraining Factors	Human Resource Deployment and Time
<p><i>Field work – secondary and primary data collection</i></p> <p>2 CD Blocks of Adhaura and Durgawati selected through consultative process. The two blocks under reference are representative of distinct contexts within the district of Kaimur – Adhaura representing hilly terrain, forested, poor irrigation network with large tribal population and prone to Naxalism while Durgawati largely representing plains, high irrigation intensity and multi-ethnic composition.</p>				
<i>Worksite Observation</i>	<ol style="list-style-type: none"> 6 worksites covered (2 on Rural Connectivity, 2 on Micro Irrigation and 1 on Water Harvesting and Conservation) and information collected on the basis of developed and endorsed research instrument. All aspects of worksite observation – physical, technical and environmental aspects covered. 	The GP level functionaries, PRS and local community members facilitated the worksite visit.	<p>Facilitating Factors: Team's ability to converse in local dialect, Strong understanding of NREGS spirit and provisions.</p> <p>Constraining Factors: Very few worksites were open at the time of field visit, requiring teams to travel long distances and to remote locations for conducting worksite observations. The sanctity of block boundaries could not be respected for the purpose.</p>	5 team members for 3 days
<i>FGD with workers</i>	<ol style="list-style-type: none"> 6 FGDs conducted using the designed research tool All aspects of availability of stipulated provisions at worksite, discrimination, labour group, participation, etc were assessed. 	The communities enthusiastically participated in the FGDs as they found this a unique platform for voicing their opinions freely.	<p>Facilitating Factors: Team's ability to converse in local dialect, Strong understanding of NREGS spirit and provisions, Team understands participatory approaches.</p>	5 team members for 2 days
<i>Semi structured interviews at GP/Block Level</i>	One to one interactions with Mukhiya, Mate, PRS, PO, JE, Computer Operator	N.A.	<p>Facilitating Factors: Directives to the block from the district for lending all support and facilitation to the team, Strong understanding of</p>	2 team members for 2 days

Table 6: Process Matrix				
Major Areas of Work	Process Details	Levels of Community Participation	Facilitating and Constraining Factors	Human Resource Deployment and Time
			NREGS spirit and provisions.	
<i>Semi structured interviews at District Level</i>	One to one interactions for seeking secondary information and perspectives with DDC and officials at NREGS cell Line Departments – Krishi Vigyan Kendra, Agriculture Department, Horticulture Department, Forest Department, MI	N.A.	Facilitating Factors: Strong understanding of NREGS spirit and provisions. Team's understanding of Green Jobs Initiative, environmental issues and Decent Work	2 team members for 2 days

Analytical Framework

For Establishing Correlation between Decent Work and Environmental Sustainability

The indicators were unpacked in the context of NREGS into possible queries and data requirements and close-ended options on a scale of 1-3 were developed. This was peer reviewed by the research team members and then finalised. Appropriate options were ascertained using observational (worksite observation), perceptual (FGDs, Interface) and secondary data-based inferences. The list is as follows:

Table 7: Indicators for Assessment with Level and Tools Used							
INDICATORS RELATED TO DECENT WORK		Level of Assessment			Tool for Assessment		
1	EMPLOYMENT RELATED INDICATORS	District	Block	Work Site	Observation	FGDs and Interface	Secondary Data
1.1	Total employment generated						
	1 Less than the state average	<input type="checkbox"/>					<input type="checkbox"/>
	2 Equal to state average						
	3 Greater than state average						
1.2	Women's participation rate						
	1 % women getting engaged in NREGS works is < 20% of the total women issued job cards	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>
	2 % women getting engaged in NREGS works is 21-33% of the total women issued job cards						
	3 % women getting engaged in NREGS works is > 33% of the total women issued job cards						
1.3	Minimum wage realisation and timely payments						
1.3.1	Wage Realisation						
	1 up to 50% of the declared daily wage rate/commensurate to the measurement of work done			<input type="checkbox"/>		<input type="checkbox"/>	
	2 51 to 99% of the declared daily wage rate/commensurate to the measurement of work done						
	3 100% of the declared daily wage rate/commensurate to the measurement of work done						
1.3.2	Timely Payments			<input type="checkbox"/>		<input type="checkbox"/>	
	1 more than 15 days						
	2 between 7 and 15 days						

Table 7: Indicators for Assessment with Level and Tools Used								
INDICATORS RELATED TO DECENT WORK			Level of Assessment			Tool for Assessment		
	3	on weekly basis						
1.3.3	Days of employment realized against demand							
	1	Up to 50% days of the employment demanded			<input type="checkbox"/>		<input type="checkbox"/>	
	2	51 to 90% of the days of employment demanded						
	3	91%-100% of the days of employment demanded						
1.4	Place of work and Nature of work							
1.4.1	Place of Work							
	1	More than 5 km with NO payment of additional 10% of wages as transportation cost			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	More than 5 km with payment of additional 10% of wages as transportation cost						
	3	Within 5 km from the place of residence						
1.4.2	Nature of Work							
	1	Work allocated on the basis of neither physical condition (age/skill) nor special condition (pregnancy/disability)						
	2	Work allocated on the basis of physical condition (age/skill) but not on special condition (pregnancy/disability)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3	Work allocated on the basis of physical condition (age/skill) and special condition (pregnancy/disability)						
2	SOCIAL PROTECTION RELATED							
2.1	Insurance Coverage Ratio (Insured against Uninsured among job card holders)							
	1	50% of Job Card holders covered for accident and life insurance			<input type="checkbox"/>		<input type="checkbox"/>	
	2	51 to 75% of Job Card holders covered for accident and life insurance						
	3	76 to 100% of Job Card holders covered for accident and life insurance						
2.2	Provisions for rest and related worksite facilities				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.2.1	Resting Space, Water and First Aid Kit							
	1	None of the facilities for resting space, drinking water and first aid kit are available						

Table 7: Indicators for Assessment with Level and Tools Used							
INDICATORS RELATED TO DECENT WORK			Level of Assessment			Tool for Assessment	
	2	Either one or two of the facilities for resting space, drinking water and first aid kit are available					
	3	All the facilities for resting space, drinking water and first aid kit are available					
2.2.2	Child Care Facility						
	1	No Crèche facility at worksite					
	2	Insecure and uncomfortable Crèche facility and a person as caretaker employed at worksite			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3	Safe and comfortable Crèche facility and a person as caretaker employed at worksite					
3	SOCIAL DIALOGUE RELATED						
3.1	Presence of labour groups						
	1	No labour groups exist			<input type="checkbox"/>		<input type="checkbox"/>
	2	Informal labour groups exist					
	3	Formal labour groups exist					
3.2	Participation of community institutions in work						
	1	SHG/CBOs/JFMCs etc are engaged are NOT INVOLVED either in planning or implementation (as implementing agencies or as workers)			<input type="checkbox"/>		<input type="checkbox"/>
	2	SHG/CBOs/JFMCs etc are engaged either in planning or implementation (as implementing agencies or as workers)					
	3	SHG/CBOs/JFMCs etc are engaged in planning and implementation (both as implementing agencies or as workers)					
3.3	Participation in planning						
	1	Inappropriate approval of plans of NREGS					
	2	Plans for NREGS approved in the second meeting of the Gram Sabha as per the condition of Panchayati Raj Act, Bihar			<input type="checkbox"/>		<input type="checkbox"/>
	3	Plans for NREGS approved in Gram Sabha meeting with 1/20th representation- first quorum condition of Panchayati Raj Act, Bihar					

Table 7: Indicators for Assessment with Level and Tools Used							
INDICATORS RELATED TO DECENT WORK			Level of Assessment			Tool for Assessment	
3.4	Awareness programme on HIV/AIDS for workers (numbers)						
	1	Awareness programme on HIV/AIDS not conducted			<input type="checkbox"/>	<input type="checkbox"/>	
	2	Awareness programme on HIV/AIDS conducted non formally					
	3	Awareness programme on HIV/AIDS conducted formally					
4	RIGHTS RELATED						
4.1	Incidences of child labour						
	1	Child labour observed and is rampant			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2	Child labour observed but nor rampant					
	3	Not observed and not reported					
4.2	Hours of work and its distribution considering seasonal conditions						
	1	Timing and hours of work is not at all decided by the participants					
	2	Decision on Timing of work and hours of work is non-unanimous			<input type="checkbox"/>	<input type="checkbox"/>	
	3	Timing of work and hours of work unanimously decided by the participants					
4.3	Incidences of Discrimination						
	1	Discrimination is observed but not recalled nor reported by the participants			<input type="checkbox"/>	<input type="checkbox"/>	
	2	Incidence of discrimination recalled but not observed					
	3	No incidence of discrimination recalled or observed					
4.4	Socio Economic Category- SC						
	1	% NREGS person days generated for SC is less than the proportion of SC HHs in the block					
	2	% NREGS person days generated for SC is equal to the proportion of SC HHs in the block	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
	3	% NREGS person days generated for SC is more than the proportion of SC HHs in the block					
4.5	Socio Economic Category- ST		<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
	1	% NREGS person days generated for ST is less than the proportion of ST HHs in the block					

Table 7: Indicators for Assessment with Level and Tools Used							
INDICATORS RELATED TO DECENT WORK			Level of Assessment			Tool for Assessment	
	2	% NREGS person days generated for ST is equal to the proportion of ST HHs in the block					
	3	% NREGS person days generated for ST is more than the proportion of ST HHs in the block					
4.6	Gender						
	1	% NREGS person days generated for Women is less than 17% in the block					
	2	% NREGS person days generated for Women is between 18-32% in the block	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>
	3	% NREGS person days generated for Women is equal to or more than 33% in the block					
INDICATORS RELATED TO ENVIRONMENTAL SUSTAINABILITY (Sample for Road Connectivity Only)							
5	STRENGTHENING OF NATURAL RESOURCES						
	1	Soil coming from agriculture/forest land			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2	Soil coming from agriculture/forest land as well as wasteland					
	3	Soil from wastelands					
6	EFFICIENT USE OF RESOURCES- ENERGY AND WATER						
	1	Uses fossil fuels and water			<input type="checkbox"/>		<input type="checkbox"/>
	2	Uses either fossil fuel or water					
	3	Does not use fossil fuel and water					
7	REDUCTION IN GHG EMISSIONS						
	1	Leads to GHG emissions					
	2	Neither contributes to GHG emissions nor reduction			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	3	Reduces GHG emissions and/or captures GHGs					
8	REUSE/RECYCLING OF WASTE						
	1	Generates waste that is not being reused or recycled			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	2	Generates waste that is being reused or recycled					
	3	Waste is not generated					

Identification of Skills Related Issues and Opportunities

For identifying skill-related issues and opportunities discussions were conducted, both with demand side representatives and supply side representatives like Panchayat members and different officials at Block and District Level. The issues related to skills-upgradation were assessed against the potential for alignment with NREGS works.

For Monitoring Green Jobs and Decent Work in NREGS

The monitoring mechanisms for Green Job in NREGS were ascertained by generating in-depth awareness on existing monitoring mechanism and testing out the indicators and innovative mechanisms through dialogue with Block and District Level functionaries.

FINDINGS

AND ANALYSIS

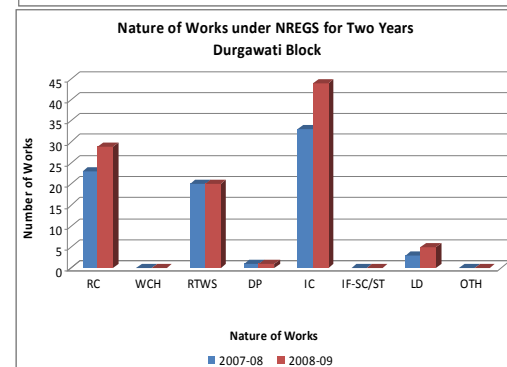
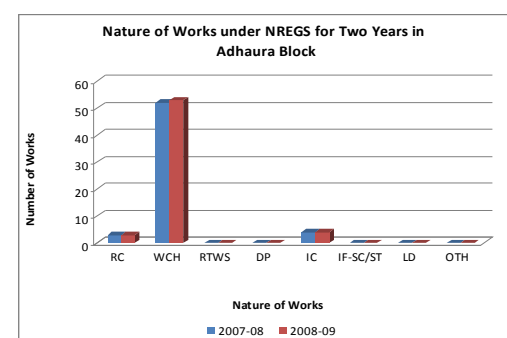
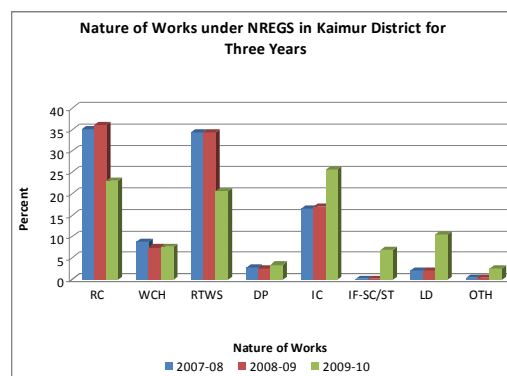
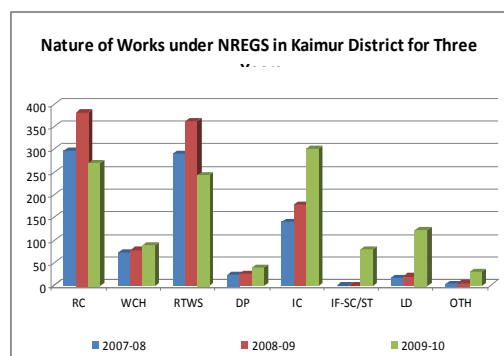


Nature of Work Implemented under NREGS in Kaimur

For the Financial Year (FY) 2007-08, 2008-09 and the ongoing FY 2009-10, the total number of tasks implemented under NREGS, were 849, 1056 and 1180 respectively. The nature of tasks undertaken under NREGS in the district can be categorised as Rural Connectivity (RC), Water Conservation and Harvesting (WCH), Renovation of Traditional Water Harvesting Structures (RTWS), Drought Proofing (DP), Irrigation Channels (IC), Irrigation Facility to SC/ST Families (IF-SC/ST), Land Development (LD) and Others (OTH).

During the FY 2007-08 and 2008-09, a majority of the work was undertaken in the area of Rural Connectivity (34 and 35 per cent respectively) followed by Renovation of Traditional Water Harvesting Structures (24 per cent for both the years respectively). It is understood that over the last three years, there has been a decline in the number of work undertaken under the Rural Connectivity, with an upsurge in the work undertaken in the area of Irrigation Channels, work on private land of SC and ST families and Land Development (*see graph towards right*). Considering the drought conditions of the district, this may be viewed as a positive trend that supports strengthening of local livelihoods, as well as natural resource base.

In the CD Blocks of Adhaura, 59 and 60 works were undertaken during the FY 2007-08 and 2008-09, while in Durgawati, it was 80 and 99 respectively. In Adhaura there is a potentially high bias towards Water Conservation and Harvesting works (over 88 per cent for both the years respectively) whereas in Durgawati majority of works were undertaken in the area of Irrigation Channel (41 and 44 per cent for FY 2007-08 and 2008-09), followed by Rural Connectivity (28 and 29 percent for FY 2007-08 and 2008-09) and Renovation of Traditional Water Harvesting Structures (25 and 20 percent for FY 2007-08 and 2008-09). The comparative analogy clearly reveals that Durgawati has a strong and a rich mix of work being undertaken under NREGS (*see graph towards left*).



NREGS Work: Co-relationship between Decent Work and Environmental Sustainability

Decent Work: Findings

The assessment of Decent Work under NREGS is based on the assessment of the four pillars of Decent Work, namely, employment related, social protection and social dialogue and rights related indicators. In the context of NREGS, each of these indicators were further unpacked into sub- indicators and each of these sub-indicators were assessed at each of the work sites selected for the study. The assessment and the score achieved by each of the indicators are given below:

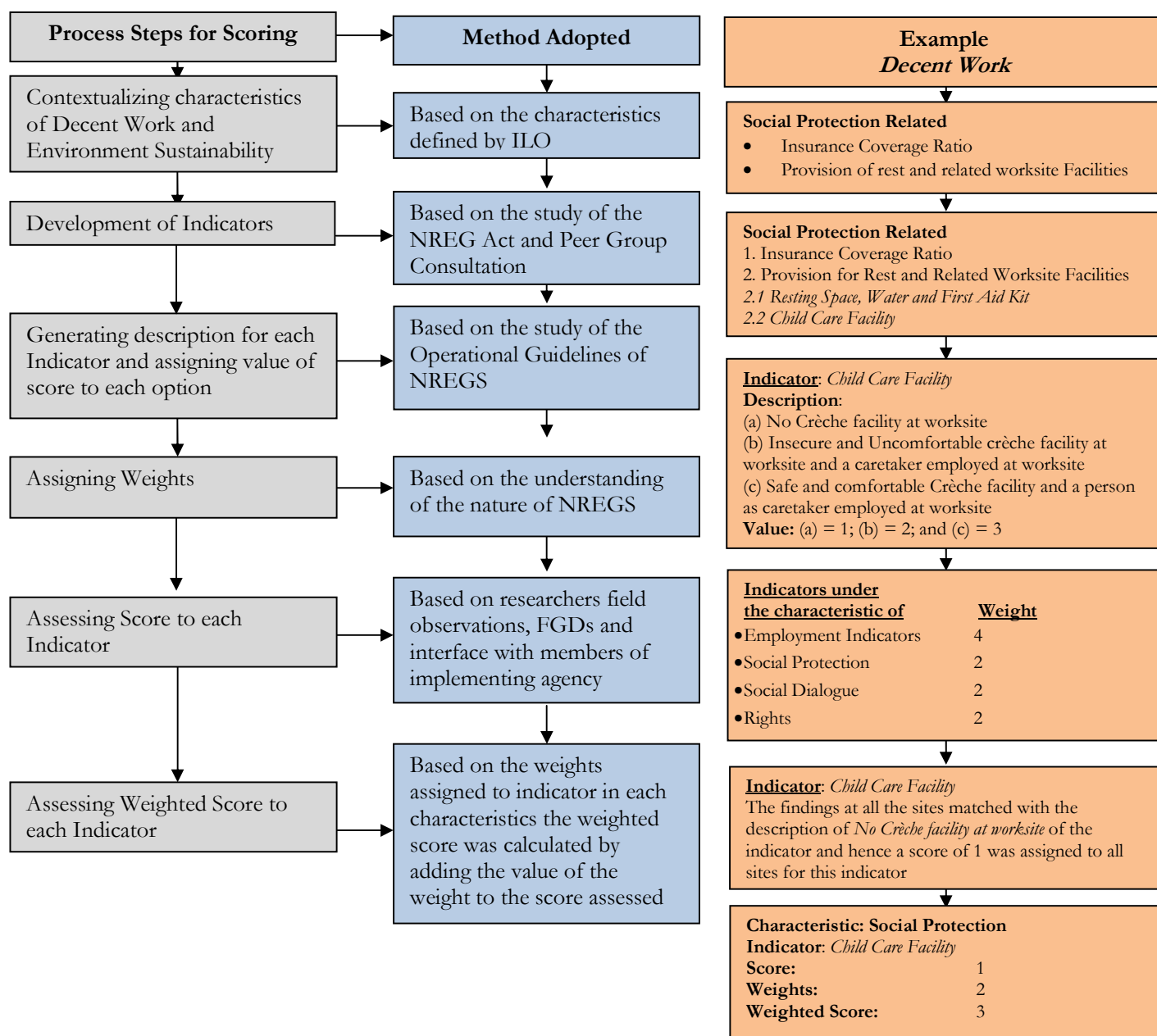
Table 8: Decent Work Indicators and Scores obtained for Three Major Nature of Works				
S. No	Indicator	Type of Work (Score)		
		Rural Connectivity	Minor Irrigation	Water Conservation
1	Employment Indicators	12	12	12
1.1	Days of Employment realized against demand for employment	3	3	3
1.2	Place of Work	3	3	3
1.3	Nature of Work	1	1	1
1.4	Realisation of Minimum Wages	3	3	3
1.5	Timely payment of Wages	2	2	2
2	Social Protection	4	4	4
2.1	Insurance Coverage Ratio	1	1	1
2.2	Provision for Rest and related facilities at worksite	2	2	2
2.3	Child Care Facility	1	1	1
3	Social Dialogue	3	3	3
3.1	Presence of Labour Groups	1	1	1
3.2	Participation in Planning	1	1	1
3.3	Awareness Programme on HIV/ AIDS	1	1	1
4	Rights	15	16	17
4.1	Incidence of Child Labour	3	3	3
4.2	Hours of Work and its seasonal distribution	2	2	2
4.3	Incidences of Discrimination	1	2	3
4.4	Employment to Scheduled Castes	3	3	3
4.5	Employment to Scheduled Tribes	3	3	3
4.6	Employment to Women	3	3	3
	TOTAL	34	35	36

The score for each of the sub indicators includes the assessment of the present state of the works on pre-defined three options. The options have been determined in a manner where the third option reflects the ideal condition and state and the first option as the undesirable state. The middle option is taken as the benchmark for the indicator. For example, for the indicator Days of Employment Realised against Demand for Employment, the ideal condition is defined as *91 per cent to 100 per cent of the days of employment demanded realised*. This option has been assigned a score of three. The least preferred option is *up to 50 per cent of the employment*

demand realised and assigned a value of one. The middle benchmark option is *51 to 90 per cent of the employment demand realised* and assigned the value of two.

Since there are 17 indicators in all, the lowest score that the work site can score will be 17 and the highest will be 51. For a work site to qualify and get identified as a decent job, it should score at least the benchmark score of 34. According to this, all the selected sites attain or cross the benchmark score of 34 and just qualify as decent with insignificant variation (refer Annex 5 for methodology for assigning weights to the indicators and detailed table elaborating the calculations for deriving weights).

Flow Chart for Calculation of Weighted Score of the Indicators



However, given the character of NREGS, where the prime focus is to generate employment, it is logical that this factor be given a higher weightage than other factors of Decent Work. Consequently, the present study has assigned weightage of 40 per cent to employment related indicators and 20 per cent each to the other three indicators. On the basis of weights, the weighted score of the indicators for the selected works is as follows:

Table 9: Cumulative Weighted Score against Benchmark Scores for Decent Work Indicators					
S. No	Indicator	Benchmark Score	Type of Work (Weighted Scores)		
			Road Connectivity	Minor Irrigation	Water Conservation
1	Employment Indicators	30	32	32	32
2	Social Protection	12	10	10	10
3	Social Dialogue	12	9	9	9
4	Rights	24	27	28	29
	TOTAL	78	78	79	80

Thus within the weighted scoring system, only the indicator related to Employment and Rights is able to cross its benchmark value. The other indicators, namely those related to Social Protection and Social Dialogue are identified with low scores, as being weak and affecting the overall score for Decent Work. The ensuing paragraphs assess each of the indicators to identify the reasons for low scores, as well as areas where more work needs to be done.

1. Employment Indicators

Employment on Demand

The National Rural Employment Guarantee Act, 2005 enabled the state governments to use fiscal and legal instruments to address the twin issues of unemployment and poverty by guaranteeing livelihood security to rural households. The Act thus provides for guaranteeing 100 days of guaranteed wage-employment every financial year to every rural household, whose adult member is willing to do unskilled manual work. The programme thus signified an important paradigm shift in that it is driven by demand of workers, as compared to the earlier supply driven programmes. To enable workers to express their *demand* there are specific provisions for registration of workers by issuing Job Card for the household and for the registration of demand-for-work application and issue of dated receipt of the application.

The discussions with the workers at site and perusal of documents reveal that:

- Workers are not aware that they have to demand work from the Gram Panchayat
- Workers are informed by the Mukhiya/Ward Member to report to the work site if they are interested in seeking employment
- An undated signed application of workers that are employed is filed with the Gram Panchayat



The net result of this practice is that the figures for households demanding work and households provided work will always remain the same and there will be no need to pay the unemployment allowance to the worker. Moreover, based on documents, it would appear that the number of days demanded by the worker have been provided to him/her as there is no mention of the number of days of work demanded in the application filed by the labourer.

However, during discussions with workers, it was found out that they were willing to work for larger number of days, but they were either asked not to come for work or the work was completed and hence no more work was immediately available even though the workers were willing to work for a larger number of days. Secondly, the starting of the work in no case was based on expressed desire of the labourer. It was started because the funds for the works were received by the Panchayat and they were given instruction to start the works as soon as possible. Thus the number of days of employment provided does not bear semblance to the number of days of demand for employment of the labourers. The score of the indicator is given below:

Table 10: Scores for Major Nature of Works undertaken in the District against Days of Employment Realised as proportion of Employment Demanded Indicator							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Days of employment realised against employment demanded	1	up to 50% days of the employment demanded	3	3	3	3	3
	2	51% to 90% of the days of employment demanded					
	3	91%-100% of the days of employment demanded					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

However, through the records it was understood that in all the works for which observations were made, the workers secured 100 per cent of the days of employment demanded.

Place of Work

The provisions of the NREGS have stated that, as far as possible the work should be given to the worker within the same Gram Panchayat and within 5 km of the place of residence. This is accorded first priority. However, in case the work site is more than 5 km away, the worker should be paid an additional 10 per cent of the wages as transportation cost. This aspect is however not covered under the present Management Information System (MIS) of NREGS, either at the district, state or central level. The findings of the study are given below:

Table 11							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Place of Work	1	More than 5 km with NO payment of additional 10% of wages as transportation cost					
	2	More than 5 km with payment of additional 10% of wages as transportation cost	3	3	3	3	3
	3	Within 5 km from the place of residence					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

The workers from the local village had been employed at the sites that were covered by the study. As a result, the work site was within 5 km from their residence. Yet from the monitoring point of view, it is important that the data on place of work be generated and analysed to ensure that workers are being paid their entitled transportation cost.

Nature of Work

Though the NREGS guarantees unskilled work only, yet the guidelines state that the work should be allotted according to the ability of the worker. The aim is to create space and opportunity for the persons with special needs, the elderly, and the pregnant women to seek benefit from the programme. This also necessitates that the tasks to be done by these persons be defined separately, so that their work is also assessed and a fair daily wage is paid to them. To assess this aspect, the study undertook worksite observations, as well as discussed the issue during FGDs with the workers and made the following assessments:

Table 12							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Nature of Work	1	Work allotted on the basis of neither physical condition (age/skill) nor special condition (pregnancy/disability)					
	2	Work allotted on the basis of physical condition (age/skill) but not on special condition (pregnancy/disability)	1	1	1	1	1
	3	Work allotted on the basis of physical condition (age/skill) and special condition (pregnancy/disability)					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh GP.							

The study observed that the elderly were allotted the same work of digging earth as an able-bodied young person. This puts the elderly at a disadvantage because of their decreased ability to undertake and accomplish the same work within the same time and with the same effort. At the site there were other opportunities where the elderly could have been employed, e.g. to give water to other workers, undertaking clearance and dressing jobs (instead of digging); and in case of elderly women, tending to and looking after children in the crèche.

Wage Realisation

The job in NREGS is broken into specific tasks and time and motion studies have defined the task that should be accomplished in a day to constitute a fair day work. For example, in case of excavation, 80 cft of earth for men and 66 cft for women have been defined to comprise one day's wages for the workers in Kaimur district. These standards have been set in the schedule of rates and the wages are set against these standards.

Table 13							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Wage Realisation	1	up to 50% of the declared daily wage rate/commensurate to the measurement of work done	3	3	3	3	3
	2	51 to 99% of the declared daily wage rate/commensurate to the measurement of work done					
	3	100% of the declared daily wage rate/commensurate to the measurement of work done					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

The workers were aware about the daily wage rate as well as the basis of earning these wages. The discussions with the workers and the implementing agency disclosed that there have been no instances of conflict regarding the amount of work done and the payment made. The rural community has sufficient experience in calculating their wages, based on the excavation work done.

Timely Payment

The NREGS guideline entitles the labourers to be paid on a weekly basis on a pre-specified day of the week. It states that in no case should they be paid after a fortnight from the date from which the work was done. The time taken in making payments to the workers at the selected sites is given below:

Table 14							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Timely Payments	1	More than 15 days	2	2	2	2	2
	2	Between 7 to 15 days					
	3	On a weekly basis					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Wages at all the work sites, were paid between 7 to 15 days. The delays are largely on account of delays in taking measurements, verification of these measurements by the Junior Engineer, making labour-wise entries in the muster roll and entering the measured information in the Measurement Book. Once this documentation is complete, the process of payment is initiated by the way of sending advice to the bank/post office for depositing the amount in the respective accounts of the labourers. There is further delay on part of the bank/post office that asks the labour (and account holder) to come on a designated date to the bank/post office and get their identity verified by the Mukhiya every time they withdraw the money.

2. Social Protection

Insurance Coverage Ratio

The Operation Guidelines of NREGS provides that the state governments can earmark a proportion of wages of the workers for different social security schemes including various insurances, survivor benefits and maternity benefits or other social security arrangements. However, such an arrangement for social security is to be voluntary in nature and should be with the consent of the labourer.

Table 15							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Insurance Coverage Ratio (Insured against Uninsured among Job Card holders)	1	up to 50% of Job Card holders covered for accident and life insurance	1	1	1	1	1
	2	up to 51 to 75% of Job Card holders covered for accident and life insurance					
	3	between 76 to 100% of Job Card holders covered for accident and life insurance					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

At none of the work sites that were visited during the study was any insurance coverage provided to the labourers. That is, the employment conditions did not have any component of social security arrangements for the labourers.

Work Site Facilities

NREGS defines the minimum work site facilities that will be made available to the labourers. These include a place with shade to provide shelter to the labourers, drinking water including a person to fill water and make it available to the workers and a first aid kit in case of any accident at the work site.

Table 16							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Resting Space, Water and First Aid Kit	1	None of the facilities for resting space, drinking water and first aid kit are available	2	2	2	2	2
	2	Either one or two of the facilities for resting space, drinking water and first aid kit are available					
	3	All the facilities for resting space, drinking water and first aid kit are available					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

The work sites had a place earmarked for taking rest that also provided shelter from the sun and drinking water facility. However, at none of the sites was the first aid kit available. The implementing agency informed that there is a first aid kit, but it was not available at the site.

Child Care Facility

NREGS stipulates that if there are more than five children at the work site, a facility for crèche has to be provided by the implementing agency and a person, preferably a woman, be engaged as caretaker of the crèche from NREGS funds.

Table 17							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Child Care Facility	1	No Crèche facility at worksite	1	1	1	1	1
	2	Insecure and uncomfortable Crèche facility and a person as caretaker employed at worksite					
	3	Safe and comfortable Crèche facility and a person as caretaker employed at worksite					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

None of the sites visited had any crèche facility.

3. Social Dialogue

Presence of Labour Groups

This indicator seeks to assess whether labour groups are organised and whether they have the space and opportunity for collective bargaining. The situation with respect to the work sites selected is as follows:

Table 18							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Presence of Labour Groups	1	No labour groups exist	1	1	1	1	1
	2	Informal labour groups exist					
	3	Formal labour groups exist					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh GP							

The labourers at the work sites were un-organised and there were neither formal nor informal groups.

Participation in Planning

The plans for the NREGS are to be prepared and approved by the Gram Sabha. The operational guidelines of the state government have provided for specific dates by which the plans from the Gram Sabha be approved and transmitted through the Gram Panchayat to the block level and then to the district level Panchayat institutions. The manner of participation for preparation of plans for NREGS is given in the Panchayati Raj Act for Bihar. The manner and extent of participation of the labourers engaged in NREGS works was found to be as follows:

Table 19							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Participation in Planning	1	Inappropriate approval of plans of NREGS	1	1	1	1	1
	2	Plans for NREGS approved in the second meeting of the Gram Sabha as per the conditions of Panchayati Raj Act, Bihar					
	3	Plans for NREGS approved in Gram Sabha meeting with 1/20th representation- first quorum condition of Panchayati Raj Act, Bihar					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Labourers reported during discussions that they had not participated in the preparation of planning for the NREGS works. In fact they were categorical that the plans were never discussed in the Gram Sabha meetings. The plans were prepared by the members of the Gram Panchayat and approval sought by sending the register for signatures at the houses of the selected members of the Gram Sabha.

Awareness Programme on HIV/AIDS

There have been no formal or informal awareness programmes on HIV/AIDS at the NREGS work site. Consequently, the assessment of the work site on this indicator is as follows:

Table 20: Scores for Major Nature of Works undertaken in the District against Place of Work Indicator							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Awareness Programme on HIV/AIDS for Workers (numbers)	1	Awareness programme on HIV/AIDS not conducted	1	1	1	1	1
	2	Awareness programme on HIV/AIDS conducted non formally					
	3	Awareness programme on HIV/AIDS conducted formally					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

4. Rights

Incidence of Child Labour

Neither at the work site observation, nor during discussions with the labourers, any incidence of child labour was reported or observed.

Table 21							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Incidences of Child Labour	1	Child labour observed and is rampant	3	3	3	3	3
	2	Child labour observed but not rampant					
	3	Not observed and not reported					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Hours of Work and its Distribution Considering Seasonal Conditions

The decision on hours of work and the time of commencement of work is taken by the implementing agency, mostly unilaterally. There is virtually no participation of labourers in these decision making processes. The decision by participants, preferably unanimously, is an important indicator of ownership and a degree of discipline. Decision taking by implementing agency may result in the selection of working hours that do not respect the current engagements and household obligations of the participating households. It has been widely reported by women that the worksite hours do not align with their household engagements and this affects their participation in NREGS works.

Table 22							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Hours of work and its distribution considering seasonal conditions	1	Timing and hours of work is not at all decided by the participants	2	2	2	2	2
	2	Decision on Timing of work and hours of work is not unanimous					
	3	Timing of work and hours of work unanimously decided by the participants					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Discrimination

Table 23: Scores for Major Nature of Works undertaken in the District against Place of Work Indicator							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Incidences of Discrimination	1	Discrimination is observed but not recalled nor reported by the participants					
	2	Incidence of discrimination recalled but not observed	1	1	2	2	3
	3	No incidence of discrimination recalled or observed					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Employment to Scheduled Castes

To assess discrimination related to excluded groups, the study collected data related to the man days generated for the scheduled caste groups and compared it to their proportion in the population of the

district. The situation of employment being accessed by the scheduled caste groups in the district is as follows:

Table 24							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Employment to Scheduled Castes	1	% NREGS person days generated for SC is less than the proportion of SC HHs in the block					
	2	% NREGS person days generated for SC is equal to the proportion of SC HHs in the block	3	3	3	3	3
	3	% NREGS person days generated for SC is equal to or more than the proportion of SC HHs in the block					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Employment to Scheduled Tribes

To assess discrimination related to the ethnic groups, the study collected data related to the man days generated for the scheduled tribe groups and compared it to their proportion in the population of the district. The situation of employment being accessed by the scheduled tribe groups in the district is as follows:

Table 25							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Employment to Scheduled Tribes	1	% NREGS person days generated for ST is less than the proportion of ST HHs in the block	3	3	3	3	3
	2	% NREGS person days generated for ST is equal to the proportion of ST HHs in the block					
	3	% NREGS person days generated for ST is equal to or more than the proportion of ST HHs in the block					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Employment to Women

The NREGS provides that 33 per cent of the person days generated should be for women. The implementing agency has been made accountable to ensure that priority is given to women in such a manner that one-third of the benefits under NERGS are provided to them as a group. The situation in the district is as follows:



Table 26							
Indicator	Value	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Employment to Women	1	% NREGS person days generated for women is less than 17% in the block					
	2	% NREGS person days generated for women is between 18-32% in the block	3	3	3	3	3
	3	% NREGS person days generated for women is equal to or more than 33% in the block					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

5. Worksite Occupational Health and Safety (OHS) Issues

The inferences on OHS have been drawn through worksite observation since these issues are not identified as important factors, either by the participating demand side representatives, or the supply side actors. Though the Act stipulates certain worksite facilities, none of the worksites visited had basic provisions like space for taking rest, or a first aid kit available. In a few of the worksites even drinking water was not stored and readily available.



People were found to be working in harsh conditions, continuously and in ergonomically non-acceptable positions. One of the workers at a worksite, when quizzed on safety issue said, “akushal kaam hai saab, garibon ke liye hai aur choti moti chot to jayaaz hai” (It’s all unskilled work Sir and NREGA is for poor people. Therefore, small wounds or hazards do not bother us). The workers were found to be continuously exposed to dust and the women prone to drudgery. Introduction of simple implements like wheel barrow can substantially reduce the drudgery at worksite. Provision of hand gloves and face masks will further improve safety conditions at worksite and support decent workplace conditions.

Environmental Sustainability: Findings

NREGS projects in Kaimur district were largely concentrated on Rural Connectivity, Water Conservation and Water Harvesting and Micro Irrigation (MI). Environmental sustainability was assessed by using the indicators listed in Table 4.

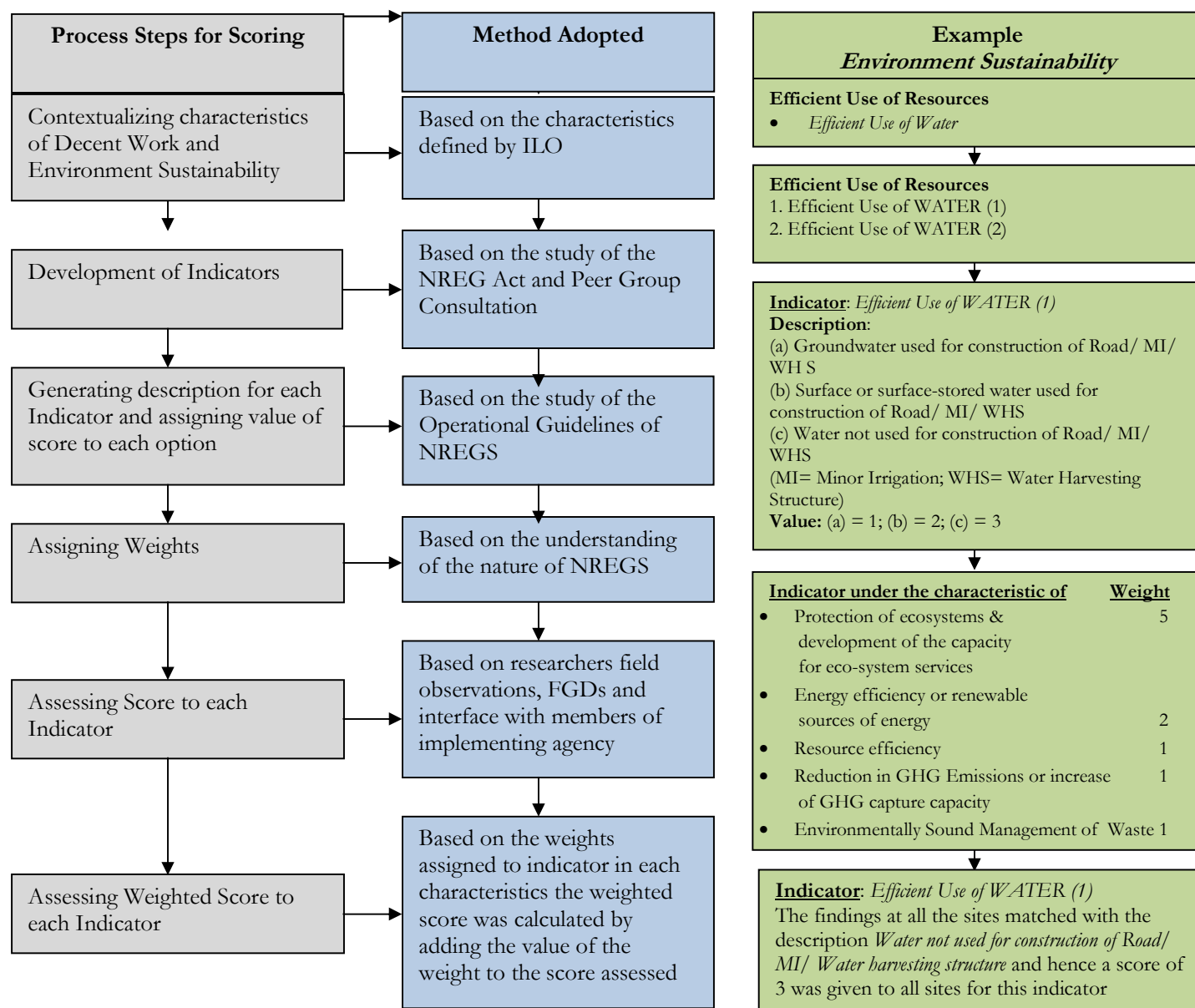
Table 27				
S. No	Indicator	Type of Work (Score)		
		Rural Connectivity	Micro Irrigation	Water Conservation
1	Protection of Ecosystems and Development of the Capacity for Eco-system Services	7	8	8
1.1	Land management and planning (1)	1	1	1
1.2	Land management and planning (2)	2	2	2
1.3	Protection and maintenance of water systems	2	3	3
1.4	Protection and maintenance FOREST	2	2	2
2	Energy Efficiency or Renewable Sources of Energy	3	3	3
2.1	Increase in Energy Efficiency (reduced use of energy)	3	3	3
3	Resource efficiency	5	6	6
3.1	Efficient use of Water (1)	3	3	3
3.2	Efficient use of Water (2)	2	3	3
4	Reduction in GHG Emissions or Increase of GHG Capture Capacity	4	4	4
4.1	Reduction in GHG Emission – Direct	2	2	2
4.2	Reduction in GHG Emission – Indirect	2	2	2
5	Environmentally Sound Management of Waste	3	3	3
5.1	Reuse and Recycling of Waste	3	3	3
	TOTAL	22	24	24

The benchmark score to qualify as environmentally sustainable works is 20 in an equal weight regime. According to this, three types of works, Rural Connectivity, Micro Irrigation and Water Harvesting Structure qualify for being termed as environmentally sustainable works. However, given the nature and objective of NREGS to strengthen the natural resource base, the indicator related to ecosystem protection and maintenance is much more important than any of the other indicators. The study has assigned it the weight of 50 per cent within the five critical environment indicators. Secondly among the remaining three indicators in the context of NREGS, where 60 per cent of the expenditure has to be on unskilled work, it should be reflected in the use of manual energy as compared to energy used through machines. Consequently, the indicator related to energy efficiency has been assigned a weight of 20 per cent and the remaining three indicators a weight of 10 per cent each. The weighted score of the five indicators is as follows:

Table 28				
S. No	Indicator	Type of Work (Weighted Score)		
		Rural Connectivity	Minor Irrigation	Water Conservation
1	Protection of ecosystems and development of the capacity for eco-system services	27	28	28
2	Energy efficiency or renewable sources of energy	5	5	5
3	Resource efficiency	7	8	8
4	Reduction in GHG Emissions or increase of GHG capture capacity	6	6	6
5	Environmentally Sound Management of Waste	4	4	4
	TOTAL	49	51	51

Within the weighted score regime, the maximum score that can be generated is 57 and the minimum score is 37. The benchmark score that qualifies for the work to be identified as environment friendly is 48, which in the above case is achieved by all the three types of works.

Flow Chart for Calculation of Weighted Score of the Indicators



1. Protection and Maintenance of Ecosystems and Development of Ecosystem Services

Land Management and Planning

The main work under NREGS is excavation of earth whether it is for construction of roads, canals or water harvesting structures. The main issue however, is the place from where the earth has been

excavated. If the earth has been excavated from agriculture and/or forest area, it has been taken to imply that productive and fertile land has been displaced and these have been given a lower score than the state where earth has been excavated from wasteland. The score on this count for the sites selected for the study is as follows:

Table 29							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Land Management and Planning (1)	1	Soil excavated from Agriculture/ Forest land	1	1	1	1	1
	2	Soil excavated from Agriculture/ Forest lands and Wasteland					
	3	Soil excavated from Wasteland					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

In all the three cases earth has been excavated from agricultural fields and hence these have been given a low score since they have displaced fertile and productive soil from the field.

The second factor that would have strengthened natural resource base of land is related to whether it has created a structure that would arrest soil erosion. This relates to the way the structure has been made and also the design that ensures compacting and compression of soil so that it does not wash away during or after the rains. The scores achieved by the work sites are as follows:

Table 30							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Land Management and Planning (2)	1	Road/MI/Water Harvesting have not led to creation of structures that arrest soil erosion	2	2	2	2	2
	2	Road/MI/Water Harvesting have led to creation of structures that arrest soil erosion, but have not undertaken physical or vegetative compacting					
	3	Road/MI/Water Harvesting have led to creation of structures that arrest soil erosion and have undertaken physical or vegetative compacting					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

In the absence of compaction of any kind, either physical or vegetative, the chances that the soil will be washed away during and after rains are high. Discussions with Junior Engineers responsible for designing the sites revealed that they were totally fixated on the non-use of machines and this meant that they did not provide for compacting of any kind. The guidelines, however, are flexible and stipulate that 40 per cent of the cost can be on materials. In this case, rolling or hammering could have been used, which would have been a labour intensive method of compaction.

Protection and Maintenance of Water Systems

The structure constructed should be designed in a manner that it does not lead to water logging in which case it would be diminishing the land as a natural resource. However, if the structure does not lead to water logging, it would score high on the indicator of environmental sustainability. The scores at the sites selected for the study are as follows:

Table 31							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Protection and Maintenance of Water Systems	1	Road/MI/Water Harvesting create water logging	2	2	3	3	3
	2	Road/MI/Water Harvesting do not create water logging					
	3	Road/MI/Water Harvesting lead to efficient use of irrigation system					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauri Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

The roads were designed in such a way that they did not lead to water logging and there were provisions for outlet through a huge pipe. In case of Minor Irrigation, through construction of field channels and earthen dams, it promotes efficient use of water and also replaces pumping of water through pumps that use fossil fuel. As a result, Minor Irrigation and Water Harvesting structures score high on energy efficiency and reduction of GHGs.

Protection and Maintenance of Forests

There are two aspects that relate to forests in the implementation of works under NREGS- one, whether implementation has led to cutting of trees or other vegetation and second, whether the works have enhanced the tree or vegetative cover as part of the construction. The scores achieved by the selected work sites are given below:

Table 32							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Protection and Maintenance of Forests	1	Road/MI/Water Harvesting have led to cutting of trees					
	2	Road/MI/Water Harvesting have not led to cutting of trees and neither have they planted trees or other vegetation	2	2	2	2	2
	3	Road/MI/Water Harvesting have planted trees and/or other vegetation					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Though the construction of roads, fixed channels, and earthen dams have not been effected by cutting of trees or other vegetation, construction of these structures have also not incorporated designs to plant more trees or other vegetation, either as part of catchments treatment or embanking, or for compacting. Hence these sites have scored two for the different work covered under the study.

2. Energy Efficiency

Increase in Energy Efficiency

One of the critical elements of NREGA is the use of manual labour, which in terms of environmental friendliness has the potential to score high. This has been reflected in the following score for the sites selected for the study:

Table 33							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Increase in Energy Efficiency	1	More than 50% of the works for Road/MI/Water Harvesting have been done by machines that run on fossil fuel					
	2	Less than 50% of the works for Road/MI/Water Harvesting have used machines that run on fossil fuel and the remaining work has been done by manual labour	3	3	3	3	3
	3	100% of the works has been done by manual labour in the construction of Road/ MI/ Water Harvesting					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

3. Resource Efficiency

Efficient Use of Water (1)

Water is used during construction for various purposes. The source from where water is drawn is of importance. Using surface water as opposed to underground water will be considered more environmentally friendly. Accordingly, the scores achieved by the sites selected for the study are given below:

Table 34							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Efficient Use of Water (1)	1	Groundwater used for construction of Road/ MI/ Water Harvesting Structure					
	2	Surface or surface-stored water used for construction of Road/ MI/ Water Harvesting Structure	3	3	3	3	3
	3	Water not used for construction of Road/ MI/ Water Harvesting Structure					
R1 & R2 are Rural Connectivity works located in Masoda Gram Panchayat; MI3 & MI4 are sites related to Micro Irrigation works located in Padhauti Gram Panchayat & WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

The second aspect of the use of water is related to whether the construction of the structure has enhanced the efficiency of the manner in which water is used. It is clear that the construction of roads has not affected the manner in which water is used, though construction of canal and earthen dam as water harvesting structures has improved the efficiency of water use.

Table 35							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Efficient Use of Water (2)	1	Construction of Road/ MI/ Water Harvesting has decreased the efficiency in the way water is being used					
	2	Construction of Road/ MI/ Water Harvesting has not affected use of water in any way	2	2	3	3	3
	3	Construction of Road/ MI/ Water Harvesting has enhanced the efficiency of water use					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

4. Reduction in GHG Emissions and Increase of GHG Capture Capacity

There are twin aspects of GHG emission in NREGA works: one is direct and is related to whether the process of construction leads to increase or reduction of GHG emissions and second is indirect and related to the use of the structure - whether it has led to or reduced carbon emissions. Both these aspects have been scored for the sites visited during the study, as indicated below:

Reduction in GHG Emissions- Direct

Table: 36							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Reduction in GHG Emissions- Direct	1	Construction of Road/MI/Water Harvesting will lead to GHG emissions					
	2	Construction of Road/MI/Water Harvesting will neither lead to nor reduce GHG emissions	2	2	2	2	2
	3	Construction of Road/MI/Water Harvesting will reduce GHG emissions					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Thus, in case of the use of process in the implementation of works, the NREGS works are carbon neutral in that they neither emit nor reduce GHG in their implementation.

Reduction in GHG Emissions - Indirect

Table 37							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Reduction in GHG Emissions- Indirect	1	The use of Road/MI/Water Harvesting has lead to GHG emissions					
	2	The use of Road/MI/Water Harvesting has neither led to nor reduced GHG emissions	2	2	2	2	2
	3	The use of Road/MI/Water Harvesting has reduced GHG emissions					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhauti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

The assets constructed have an indirect impact on emissions through an increase in the manufacturing of the materials used. This increase would be more significant for Micro Irrigation and Water Harvesting. However, this contribution would be deemed negligible in the present case.

5. Environmentally Sound Management of Waste

The fifth cluster of indicators to review environmental sustainability relates to the degree of elaboration of waste management practices. This includes such aspects as whether waste is being generated in the first place, whether it can be minimised or prevented, whether it can be recycled, reused, recovered, and how it is disposed of. The works studied were of the nature where no waste was being generated. Hence they achieved a score of three on this indicator.

Table 38							
Indicator	Score	Description	Findings (Sites Visited)				
			R1	R2	MI3	MI4	WH5
Environmentally Sound Management of Waste	1	Generates waste that is not being reused or recycled	3	3	3	3	3
	2	Generates waste that is being reused or recycled					
	3	Waste is not generated					
R1 and R2 are related to Rural Connectivity located in Masoda Gram Panchayat; MI3 and MI4 are work sites related to Micro Irrigation works located in Padhanti Gram Panchayat and WH5 is the Water Harvesting work located in Ramgarh Gram Panchayat							

Environment Friendliness

The three types of works that have been studied qualify as environmentally sustainable based on the scores achieved on all the indicators. However, Micro Irrigation and Water Harvesting Structures appear to be more environmentally friendly than Road Construction as these works have the twin advantage of strengthening both land and water as a natural resource, as well as bringing efficiency in the use of water.

The missed opportunity by all three types of works under NREGS is to tap the potential of planting trees and other vegetation that would offer the dual advantage of vegetative compaction of soil, as well as regenerating the tree cover to enhance the capacity to capture GHG.

6. NREGS – Sustaining GREEN

The following paragraphs detail the specific areas where the different works score more and a comparison between different works studied during the current exercise.

Although the majority of the works undertaken under NREGS would qualify as environment friendly, some nuances need to be brought in. The current way of execution staunchly advocates maintenance of 60:40 wage and material ratio for each work level, thus at times compromising on the quality of works undertaken and also the premise of creation of durable assets. For instance, work related to rural connectivity currently do not take into account the factor of compaction of loose soil that supports

durability factor due to stereotyped way of technical planning and estimation. Thus, there is very low dependence on material component that helps the work qualify on indicators of environment friendliness.

If the durability of asset factor attains the kind of prominence that it is not getting at this point of time, the requirement of durable materials will increase significantly with some indirect/direct environmental impact. Thus the backward segment of the value chain also needs to be green for the overall green-ness of the NREGS work. The current production practices for different kinds of materials are widely reported to be non-green entities like red bricks from traditional brick clamps that generate high volumes of CO2 emissions. With an upsurge in demand of materials like bricks, cement, boulders, tree-guards etc. to ensure durability of assets and thus strengthening of livelihoods, effort is also required towards the greening of the material supply end to further improve the environmental sustainability of NREGS.

Skills related Issues and Opportunities

NREGS is largely regarded as a programme that engages and promotes unskilled labour. Any involvement of a skilled workforce technically becomes part of the material cost under the 60:40 wage and material ratio that is to be followed by the State Government. There have been diverse experiences of distinct extremities – one of skill migration, wherein skilled workforce migrates to unskilled domain of work, as the wage realisation in skilled domain of work is poor due to the exploitation or poor access to markets and another being reluctance among several eligible and potential demand side representatives to participate in NREGS work due to perceived threat of untimely and hassled payments.

Arguments have been put forward regarding NREGS being just a safety net for citizens in realising economic security in situations of distress. It has been said that in no way can it be generous enough to ensure year long employment guarantee for a family. Evolving from safety net to higher tiers of economic empowerment will always call for acquisition of skills that support better income accruals and economic viability for a family. Thus, skill upgrade can help NREGS to become decent and environmentally friendly to begin with and then transcend across other domains of economic activity that support greening of other sectors and also higher income accruals.

There are certain skill upgrade possibilities that cut across different sectors of work undertaken under NREGS, while some are sector specific. The table below summarises the possible areas of skill development, possible synergy that can be established with NREGS and also explores other possible areas and sectors that can benefit out of this development.

Table 39: Skill upgradation in synergy with NREGS			
Skill Possibilities and Target Audience	Upgradation	Synergy with NREGS	Alignment with other Sectors
Integrated and holistic planning – PRI members		Supports identification of works that contribute towards creation of durable assets and strengthens natural resource base.	Supports convergent action and resource pooling – like NREGS, BRGF, 12 th Finance Commission etc. that ensures magnification in development works and opens avenues for higher realisation of development funds.
Estimation and Measurement related skills – educated and unemployed youth		Service providers as Mates under NREGS	Service providers to other schemes/ programmes of the govt., private works (BRGF, IAY, Education dept, ICDS, TSC etc).
Administering first aid – educated and unemployed youth		As first aid provider at the work sites.	Opportunities of engagement as paramedical staff with local dispensary, as contractual staff with PHC/CHC or independent service provider for the village community.
IRDA certified insurance agents - educated and unemployed youth		Insurance coverage to the Job Card holders	Independent service provider
Crèche management – women, PwD		Management of crèche facility at the work site	Opportunities for running a crèche centre at the village level or getting employed at play school or private run crèche.
Green material suppliers – semi-skilled or traditional artisans		Material supplier in NREGS works e.g. saplings for afforestation works, green construction materials	Servicing IAY beneficiaries, supply to government and/or private infrastructure development works, forest departments.
Social auditors – educated and unemployed youth, PwD		Conduct social audits under NREGS	Opportunities to work in development sector.
Business correspondents – educated and unemployed youth		Support timely and efficient transactions to the NREGS participants	Servicing other clients.
Data entry operators – educated person		Support timely updating on MIS for NREGS works	Operate DTP centres and Resource Information centres or independent/ contractual services

Monitoring Green Jobs and Decent Work under NREGS

An elaborate monitoring system has been designed for tracking progress and outcomes under NREGS in the state. The system has been designed for all levels, including Gram Sabha, Gram Panchayat, Block and District Panchayat and State level cell responsible for NREGS. To enable this system to function effectively, it is supported by an online comprehensive Monitoring Information System that contains information related to key performance indicators at each level.



The Operational Guidelines for NREGS stipulate that the States (by the Centre) and the Districts (by the State) should be ranked annually on key performance indicators so as to enable evaluation of performance of the state/districts. The key performance indicators for this purpose include- extent to which applications have been met; productive value of the completed work; quality of record- keeping and reporting; accessibility and transparency of NREGS documents; timeliness of wage payments; timeliness and quality of social audits and involvement of Gram Sambas.

The monitoring system for NREGS that has been designed and is in operation is as follows:

Table 40				
S. No	Monitoring Agency	Monitoring Parameter	Frequency of Monitoring	Reporting and Feedback
1	Gram Sabha through the Vigilance Committee	<ul style="list-style-type: none"> – All works under NREGS at village level – Registration and Issue of Job Cards – Employment provided against applied for – Timely payment of wages 	Not stated	Not stated
2	Gram Panchayat	<ul style="list-style-type: none"> – Works executed by other implementing agencies – Muster Roll maintained at worksites – Payments made to labourers 	As and when required	Monthly Report submitted by PRS
3	Block Panchayat	– Refer MPR	Weekly Meeting with PRS at the block	Monthly Consolidated Report of the block sent by Programme Officer to district
4	District Panchayat	– Refer MPR	Fortnightly meetings of Programme Officer at the district	Monthly Consolidated Report of the district format and through MIS system
5	State Level	– Refer MPR	Monthly meeting with DDC at the state	Monthly Consolidated report of the state Format and through MIS system
6	External Monitoring through Quality Monitors	Terms of Reference developed for Central, State and District Progress and Quality Monitoring of works	No fixed cycle	Quality reports submitted at the Central, State and District level

The parameters monitored through the Monthly Progress Report include the following:

Table 41		
S. No	Monitoring Parameter	Unit and Levels of Disaggregation
1	Issue of Job Card	Household wise Caste-wise Job Cards issued
2	Demand for Work and Employment provided	Household
3	Person days employment generated	Caste wise, gender wise, persons with disability; beneficiaries of IAY/Land reform; and households provided employment for 100 days in a financial year
4	Financial Progress	Funds received from source and expenditure incurred on skilled, unskilled labourers, material and administrative cost
5	Physical Progress	In progress and completed works based on category of works
6	Mode of Payments	Accounts opened and amount disbursed through banks/post offices
7	Transparency in NREGS	Muster rolls issued, social audits conducted, works inspected, conduct of Gram Sabhas and complaints received
8	Training Provided	For all functionaries under NREGS

The present monitoring system though comprehensive in nature, is not suited to collect and monitor information related to Decent Work and environment friendly works. For example, the present monitoring system does not collect information on the number of persons who have been paid wages within the stipulated time period of 15 days. Similarly it does not collect information on the facilities provided to workers at the site.

The present study recommends inclusion of the following parameters for monitoring, so as to track the parameters related to decent and environment friendly works. These parameters are monitorable and can be tracked within the present monitoring set up that is based on reporting through the MPR.

Table 42

S. No	Parameter for Monitoring	Data Collection
DECENT WORK		
1	Place of work	How far is the work site from the place of residence of labour? In case of more than 5 km have 10% of wages been paid as transportation cost?
2	Timely payment of wages	No. of workers paid wages within 15 days of their work?
3	Facilities provided at work site	Are the following facilities provided at work site? – Drinking water – First Aid – Shade and Shelter – Crèche
4	Insurance	Number of labourers opting for insurance or any other social security scheme
5	Grievance lodged vs. grievances addressed and mitigated	No. of complaints lodged and how many of them were addressed and mitigated
6	Injuries and Accidents	No. and type of accidents and injuries reported from NREGS work sites Compensation paid for injuries and accidents
ENVIRONMENTAL SUSTAINABILITY		
	Share of environmentally friendly works under the NREGS (to be measured in man-months, funds, etc)	On the basis that some works are more environment-related than others - Drought proofing, MI, water conservation, flood control, renovation of water bodies should be highly marked.
7	Increase in Tree Cover	No. and types of trees planted Survival rate of trees planted
8	Source of Soil Excavation for structures	Source from soil is excavated for construction purposes
9	Number of trees felled for construction of structures	Number of trees felled Species of trees felled
10	Use of Water	Source from where water is used for construction purposes

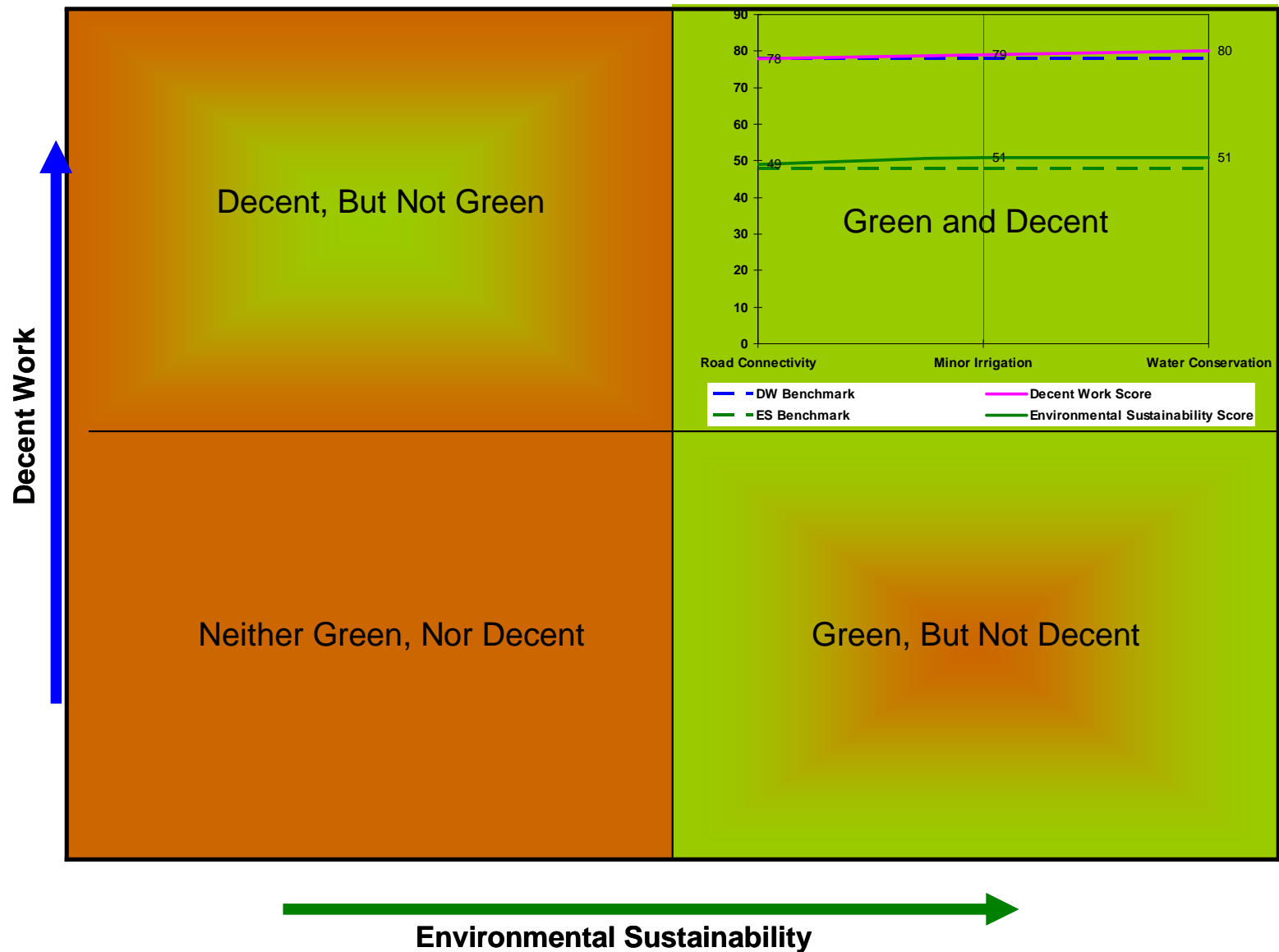
CONCLUSION

AND WAY FORWARD



Conclusion

The study has attempted to review and measure the performance of the work conducted under NREGS, in terms of decency of the jobs created and environmental sustainability. The matrix clearly reveals that majority of work identified in Kaimur lies within the domain of work that are Green and Decent.



The matrix above clearly reveals that the majority of the work have just crossed the benchmark value on the Decent Work parameters with insignificant variation across the nature of works undertaken under NREGS in the district, whereas in terms of environmental sustainability there is significant variation across the nature of works undertaken under NREGS. Rural Connectivity related works score lower values in comparison with Minor Irrigation and Water Conservation works.

The study has demonstrated that the jobs created under NREGS in Kaimur district should be considered Green Jobs, as these jobs are decent jobs and contribute to environmental sustainability. The jobs created to improve rural connectivity under NREGS would also be considered green jobs, should they be decent, under the assumption that the labour intensive way of constructing roads is carbon friendly, as opposed to the other methods that make an extensive use of machinery.

However, as the works just cross the benchmark score, there is enormous scope in ensuring that the tasks undertaken under NREGS are more decent and green. The following suggestions are being made in this regard:

- The planning processes need to be strengthened and consolidation of resources need to be undertaken at GP, Block and District level to favour holistic and integrated planning of the work under NREGS. The study also advocates convergent action wherein diverse actors with specialised skill sets are involved in the process of planning, designing and implementation of NREGS works to maintain higher degree of environmental sustainability.
- The NREGS workers need to be well protected through diverse kinds of government sponsored social security schemes (insurance etc.).
- Worksite facilities need to be improved. For instance high degree of drudgery can be reduced by simple implements like wheel barrow, sharp tools etc. This also does not meddle with the provisions and spirit of the Act.
- Crèche facility is not available at a majority of the location. This is one of the important hindrances in the participation by women in NREGS work. The provision of crèche not only supports women's participation, but also acts as a point of convergence of many education related programmes apart from generating employment opportunities for the elderly and PwD.
- Majority of demand side representatives are illiterate and belong to the lower strata of society. They are voiceless with poor negotiation skills. It is strongly recommended that the demand side be

organised for strengthening their participation in planning, execution and monitoring of NREGS works apart from also engaging in management of assets created under NREGS.

- With an increase in the portfolio of NREGS work, it is expected that the migrating population will find it more lucrative to work under NREGS than to migrate. It is understood that the majority of people migrate out predominantly due to distress rather than by choice; thus the NREGS worksites can also be one of the important centres for organising formal and informal programmes on HIV/AIDS.

Next Step

This assessment has brought forth several insights on NREGS from a Decent Work and environmental sustainability perspective. NREGS being one of the flagship initiatives and slated to benefit millions of households has a strong potential for improving the carbon foot-print of the economy.

The concept of Green Jobs can be adequately used to help monitor the Decent Work and environmental sustainability dimensions of flagship initiatives and would therefore benefit from a focused communication strategy. This calls for multi-stakeholder action involving the government, the social partners, the Civil Society Organisations and international agencies like ILO. ILO being the promoter of the Green Jobs Initiative needs to institute a study for designing of suitable communication strategy for the promotion of the Green Jobs concept and programme.

If similar assessments have to be undertaken for other major initiatives like the Indira Awaas Yojana, Total Sanitation Campaign etc. a user-friendly assessment toolkit would need to be developed and made available in the public domain. It would therefore be important to develop a standard Green Jobs Assessment Toolkit and Manual for monitoring green jobs creation in flagship initiatives that have a pan-national presence.

This study focused mainly on the implementation mechanism of NREGS works but environmental sustainability is also dependent on factors related to impact and use of assets being created under NREGS. Thus, the monitoring of NREGS works based on indicators of Decent Work and environmental sustainability would be critical as a knowledge product. This also creates scope for accessing carbon credits and other climate and environment related financial schemes that will support magnification of resource allocation for NREGS. This also calls for making investments in the development and institutionalisation of appropriate Monitoring and Evaluation Systems with robust MIS to support tracking of Green Jobs creation under NREGS.

There are variations in the way NREGS is implemented in different parts of the country because of the high degree of flexibility that NREGS allows for in the selection of works and the modus operandi of its implementation. One of the limitations of this study was its geographical scope and the limited coverage of existing agro-climatic situations, as well as the limited range of the types of works surveyed. It is therefore

important to commission a study that makes comparative analogies regarding decency and environmental sustainability of works undertaken under NREGS in different parts of the country.

The current assessment had its own limitations in terms of its scope and resource availability. There are interesting observational and perceptual understandings of NREGS worksites from the Operational Health and Safety (OHS) perspective. The worksite conditions can be substantially transformed for magnifying the social security cover and intensity. It will be useful and interesting to undertake the OHS audit of the worksites and come out with recommendations for making the work under NREGS more decent.

This study has been instrumental in demonstrating the benefits of integrating the Decent Work and environmental sustainability dimensions into the NREGS guidelines for overall planning, implementation, monitoring and reporting. This would not only amplify the benefits that NREGS can provide to citizens, but would also help monitor in a more systematic manner the contribution that such large scale programmes make towards maintaining the environmental capital in particular in rural areas and the whole society in general .

ANNEXES



Annex 1: Worksite checklist

How to Complete the “Worksite Checklist”

1. Your visit to the worksite should be unannounced, during work hours.
2. Start by observing the state of the worksite: what labourers are doing, which facilities are available, what the mate is doing, whether any machines are being used etc.
3. Count the labourers.
4. One team member should take the “mate” apart and keep him/her busy, so that the mate does not interfere with the group discussion with labourers. Ask the mate for the muster rolls and other records (even if they are in kuccha form).
5. Conduct an informal group discussion with the labourers around the issues listed in the Checklist (not necessarily in the same order). Introduce yourselves carefully before the discussion begins.
6. Make sure that women participate and get a chance to speak. If possible, hold separate discussions with men and women.
7. Make sure that PwD and Elderly (if observed) get a chance to speak.
8. Note any useful responses as you go along, on a draft copy of the Checklist.
9. Towards the end of the discussion, take the opportunity to inform workers about their rights, help them to read the “entitlements” page on the Job Card, distribute leaflets or primers, answer queries, and so on. If possible use songs, slogans, etc., to enliven the discussion.
10. If any labourers have a serious complaint, take it in writing on the “affidavit” form. Note all relevant details, and take the signatures or thumbprints of the concerned persons, as well as witnesses. Before asking anyone to sign an affidavit, please request a local person (not a team member) to read it aloud in the local language.
11. Inspect the worksite, including the worksite board and the worksite facilities. Also, try to assess the economic usefulness of the work, with the workers.
12. If needed, meet the Panchayat Sachiv or go to the Panchayat Bhawan to fill the “Worksite Details” section at the end of the Checklist.
13. After all this is over, sit together as a team and fill a fair copy of the Checklist.
14. If you observe anything significant, take a note of it in separate sheet of paper and incorporate and highlight that observation and finding in your narrative report.

NREGS Green Jobs Assessment Worksite Checklist

[Investigators: This questionnaire should be filled at the worksite, based on careful enquiries from the labourers (make sure to involve both women and men). Ask the labourers and not the 'mate', sarpanch, sachiv, contractor etc. If some of them are present, one team member can take charge of distracting them by holding a separate discussion with them at a safe distance.]

Village: /_____/ Gram Panchayat: /_____/ Block: /_____/

Date: /_____/ Names of investigators: /_____/

Name of work: /_____/

Starting date of work: /_____/

Muster Rolls	
Was the muster roll available at the worksite when you arrived? [1 = Yes; 2 = No; 9 = Unclear]	/____/
If yes, was the muster roll "up to date" (including today's attendance)? [1 = Yes; 2 = No; 9 = Unclear]	/____/
How many labourers were at the worksite today, according to the muster roll? (Enter number of labourers in the box. If you can't tell, write "NA".)	/____/
How many labourers were actually at the worksite when you arrived? (Enter number of labourers in the box. If you can't tell, write "NA".)	/____/
Did you notice any irregularities in the muster roll? (e.g. fake names, fake attendance details, signatures being taken before payments are made, muster roll complete in all respect) [1 = Yes; 2 = No; 9 = Unclear] If yes, please describe. _____ _____ _____ _____	/____/

Wage Payments	
Have any wages been paid so far at this worksite? [1 = Yes; 2 = No; 9 = Unclear]	/____/
[Investigators: If no wages have been paid, <u>skip this section.</u>]	
How many days have passed since the last wage payment at this worksite? (Enter number of days in the box; e.g. 30 days. If you can't tell, write "NA".)	/____/
[Investigators: The following questions apply to the <u>last payment</u> made at this worksite.]	
Last time wages were paid:	
Did it happen within 15 days of the work being done? [1 = Yes; 2 = No, but payment was made within a month; 3 = No, and payment was not even made within a month; 4 = Unclear]	/____/
Did labourers get the minimum wage (Rs 102/day)? [1 = Everyone got the minimum wage; 2 = Only some labourers got the minimum wage; 3 = No-one got the minimum wage; 9 = Unclear]	/____/
Was the payment made through Bank / PO Accounts of the labourer? [1 = Yes; 2 = No; 9 = Unclear]	/____/
Were job cards entries made in front of the labourers? [1 = Yes; 2 = No; 9 = Unclear]	/____/
"Average wage": Try to find out how much the labourers earned on average (in rupees per day), the last time wages were paid. If you are not able to tell, write "NA". Average earnings per day (Rs):	/____/
At this worksite, what is the longest time labourers had to wait for payment, after the end of a pakhwada (fortnight)? (Enter number of days in the box; e.g. 30 days. If you can't tell, write "NA".)	/____/
How many days have lapsed since work was measured? (Enter number of days in the box; e.g. 30 days. If you can't tell, write "NA".)	/____/
Worksite Facilities	
Were the following facilities available at the worksite, at the time of your visit? [1=yes; 2 = No; 9=unclear]	
Shade for periods of rest	/____/
Drinking water	/____/
First-aid kit	/____/

Child care facility	/ ____/
Any other facility that you noticed (narrate)	/ ____/
Narrate the quality of the above facilities at the work site, e.g. is the shade large enough to accommodate every body; first aid kit is complete; the pot/container in which drinking water is kept and is it taken out by a ladle etc	
Is there a board at the worksite? [1=yes; 2 = No; 9=unclear]	/ ____/
Does the worksite board provide the following information? [1=yes; 2 = No; 9=unclear]	
Total amount sanctioned	/ ____/
Amount sanctioned for labour component	/ ____/
Minimum wage	/ ____/
Task required to earn minimum wage	/ ____/
Evidence of Irregularities	
Did you find any evidence of the involvement of a contractor at the worksite? [1 = yes; 2 = no; 9=unclear]	/ ____/
If yes, please describe. _____ _____	
Did you find any evidence of use (at any time) of labour-displacing machines at the worksite? [1 = yes; 2 = no; 9=unclear]	/ ____/
If yes, please describe. _____ _____	
Did you notice any evidence of corruption of any kind at this worksite? [1 = yes; 2 = no; 9=unclear]	/ ____/
If yes, please describe.	

<p>Did you notice that the work allotted to Elderly/Persons with Disability is not commensurate with their abilities</p> <p>[1 = yes; 2 = no; 9 = unclear]</p>	/ ____/
Other Questions	
<p>Did you notice any kind of drudgery in accomplishment of works?</p> <p>[1 = yes, 2 = No, 9 = unclear]</p> <p>Please narrate your reason for choosing 1, 2 or 9.</p> <p>_____</p> <p>_____</p>	/ ____/
<p>If answer to above question is yes then answer these questions, if no skip this section</p> <p>Was it male or female workers who were facing drudgery in accomplishment of works?</p> <p>[1 = Male, 2 = Female, 3 = Both]</p> <p><i>Explain the nature of drudgery</i></p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	/ ____/
<p>Do any of the labourers employed at this worksite live further than 5 km from the worksite?</p> <p>[1 = yes; 2 = no; 9 = unclear]</p>	/ ____/
<p>Did you observe any PwD or elderly involved at the worksite</p> <p>[1 = yes; 2 = no]</p> <p><i>If yes, narrate the nature of work they were performing</i></p> <p>_____</p> <p>_____</p> <p>_____</p>	/ ____/

Did you observe any group or association of labourers engaged in the work [1 = yes; 2 = no]	/ ____/
If yes, narrate the exact nature of group – e.g. CBO, SHG, Labour's Collective	

Appendix: Worksite Details

[Investigators: If needed, seek the information below from the Mukhiya, PRS, PO or Panchayat Bhawan.]

Description of work: / _____/

Implementing Agency: / _____/

Amount sanctioned: (1) Total: / _____/ (2) Labour component: / _____/

Annex 2: Checklist - FGD with workers

Guiding Questions
Employment Related <ul style="list-style-type: none"> ○ What is daily wage rate under NREGS? ○ How much do you realise? ○ After how many days did you realise your wages? ○ Do you hold a bank/post-office account? ○ Were the wages paid through your bank/post office account? ○ How many days of employment did you receive during the last year? ○ How many days of employment did you receive this year? So far
Social Protection Related <ul style="list-style-type: none"> ○ Are you aware of insurance provisions under NREGS? ○ Are you insured? <i>(even if the person says yes, his job card needs to be verified if the policy number and other insurance details are mentioned at appropriate place?)</i> ○ Have you heard of any incidence of injury or death while at work under NREGS? If yes, elaborate the nature and number of such incidences. ○ If yes, can you recall is necessary health care services were provided or not? ○ Have you heard of any one who has availed of insurance benefits? ○ What are the facilities available at workplace? Record the response in detail. ○ Do you think any simple tools or protection equipments (like masks) should be provided? If yes, record the kind of tools and why is it important?
Social Dialogue Related <ul style="list-style-type: none"> ○ Has there been any episode of any community institution taking up responsibility of implementing NREGS works? If yes, ask for elaboration – which one, where, what was the experience etc. ○ Do you feel need for worker's collective – if yes formal or informal? ○ If yes, who should be the members and who should not? ○ If yes, what should this collective work for? Elaborate and report ○ Do you think workers collective can mitigate the operational discrepancies? If yes, How? ○ Do you participate in GS meetings? If no, why? ○ Were you part of planning process for selection of works under NREGS? ○ Is there any grievance addressal system? ○ Who do you contact in case of any grievances? Where do you go next in case the first party is unable to address or mitigate your grievances? ○ Are you aware of any grievances been lodged? If yes did it get mitigated? Record the nature of grievance and solution offered and the time lag? Look for the grievance register at Panchayat. ○ Have you been trained on OHS and HIV/AIDS? ○ If yes, when and by whom? ○ Have there been any social audits performed? If yes, by whom and when and how frequent? ○ Is there any <i>nigrani samiti (monitoring committee)</i> supervising your work? If yes, are any of you members of the samiti? Who are the members?
Rights related <ul style="list-style-type: none"> ○ Are children (non adults) allowed to work under NREGS? ○ How many hours do you work every day for realisation of minimum wages? ○ Do you decide the work timing according to seasonal conditions? If no, then who decides the work timings?

Guiding Questions

- Should women work under NREGS? If no, why?
- Should PwD and elderly work under NREGS? If no, why? Do you advocate for their engagement in NREGS works?
- What should be the nature of works allotted to them?

Environment related

- Do you think the works undertaken under NREGS are environmentally friendly? If yes, why and if no, why?
- From where is the earth excavated for construction of roads under NREGS?
- What is done with the silt collected while deepening of pond under NREGS?
- Are the species being planted under afforestation and social forestry drives appropriate to the agro-climatic conditions of the region?

Annex 3: Checklist of questions for the block level officials

1. This checklist of questions is for the government officials at the block level.
2. The questions will be administered to the representatives of the NREGS implementation team, block level representatives of the Forest, Water Resources, Agriculture, Horticulture, Fisheries, Animal Husbandry
3. The aim of this instrument is to elicit information from the departments on their assessment of the present level of green jobs in the manner in which the works are implemented, the schemes and programmes of the respective department which have the potential of introducing/deepening the green aspects of works under NREGS and the possibility and potential of converging such schemes/programmes with NREGS.
4. This instrument is not a questionnaire. It is a check list of questions that will have to be adapted for each of the departments that are being contacted at the block level.
5. Before asking the questions it will be necessary to make the block official comfortable. The objective of the study and the reason for asking questions from the representative should be clearly stated. It needs to be pointed out that the answers given by him/her will in no way reflect on the performance of the department nor will the report use them to comment on the department's capacity to deliver services.

1 Information related to NREGS

1.1 Which of the following works and the types of assets have been created under NREGS in the block

- (a) Rural Connectivity
- (b) Drought Proofing
- (c) Afforestation
- (d) Irrigation
- (e) Water Conservation
- (f) Flood control and protection
- (g) Others

1.2 How do you assess the potential of these works and assets in terms of their ability to:

- (a) Strengthen natural resource base
- (b) Efficient use of energy
- (c) Reduce emission of Green House Gas
- (d) Use of renewable energy

Specific examples and reasons should be stated while making this assessment.

1.3 What is the procedure for procurement of materials under NREGS:

- (a) Types of materials procured
- (b) Centralised-decentralised procurement
- (c) Parameters for identifying the supplier (cost, quality etc)

Are there considerations of procuring materials from the supplier who uses environment friendly process of production (renewable energy, low fuel consumption technology, etc)

2 Information related to department's schemes and programmes

2.1 Generate a list of the schemes and programmes of the department that are being implemented in the block

2.2 Take each of the programmes and schemes and ask the representative to assess these programmes in terms of their ability to:

- (a) Strengthen natural resource base
- (b) Efficient use of energy
- (c) Reduction on emission of Green House Gas
- (d) Use of renewable energy

2.3 What are the procurement procedures for materials and supplies under the programmes and schemes with respect to:

- (a) Types of materials procured
- (b) centralised-decentralised procurement
- (c) parameters for identifying the supplier (cost, quality etc)

Are there considerations of procuring materials from the supplier who uses environment-friendly process of production (renewable energy, low fuel consumption technology, etc)

3 Convergence with NREGS

- 3.1 What are the possibilities of converging the department's programmes with NREGS:
- (a) planning for works in terms of choice and location of works
 - (b) supplementing/complementing in works and creation of assets
 - (c) sharing of resources
 - (d) value additions by sharing use of assets created
- 3.2 If there are possibilities for convergence what would be the appropriate process which would promote and strengthen such convergence

Annex 4: Checklist of questions at the district level officials

1. This checklist of questions is for the government officials at the district level.
2. The questions will be administered to the representatives of the NREGS implementation team, district level representatives of the Forest, Water Resources, Agriculture, Horticulture, Fisheries, Animal Husbandry
3. The aim of this instrument is to elicit information from the departments on their assessment of the present level of green jobs in the manner in which the works are implemented, the schemes and programmes of the respective department which have the potential of introducing/deepening the green aspects of works under NREGS and the possibility and potential of converging such schemes/programmes with NREGS.
4. This instrument is not a questionnaire. It is a check list of questions that will have to be adapted for each of the departments that are being contacted at the district level.
5. Before asking the questions it will be necessary to make the district official comfortable. The objective of the study and the reason for asking questions from the representative should be clearly stated. It needs to be pointed out that the answers given by him/her will in no way reflect on the performance of the department nor will the report use them to comment on the department's capacity to deliver services.

1. State of environment in the district

- 1.1 What are the major environmental concerns in the district (prompt for water, land, forest)
- 1.2 How do these environment factors affect the livelihood of people in the district (degradation of land, lack of water, decrease in fuel supply, etc)
- 1.3 How does your department seek to mitigate the environmental factors (ask specifically mitigation through regeneration, through conservation and through adaptation). Are there specific annual or five year plans for these strategies? If Yes, what is the budget and if possible to secure a copy of these plans?
- 1.4 Are the environmental concerns of the district addressed in any way under the NREGS works and assets in the district? If yes, give specific examples.

2. Information related to NREGS

- 2.1 Which of the following works and the types of assets have been created under NREGS in the block
 - (h) Rural Connectivity
 - (i) Drought Proofing
 - (j) Afforestation
 - (k) Irrigation
 - (l) Water Conservation
 - (m) Flood control and protection
 - (n) Others
- 2.2 How do you assess the potential of these works and assets in terms of their ability to:
 - (e) Strengthen natural resource base
 - (f) Efficient use of energy
 - (g) Reduced emissions of Green House Gas
 - (h) Use of renewable energy

Specific examples and reasons should be stated while making this assessment.

- 2.3 What is the procedure for procurement of materials under NREGS:
 - (d) Types of materials procured
 - (e) Centralised-decentralised procurement
 - (f) Parameters for identifying the supplier (cost, quality etc)

Are there considerations of procuring materials from the supplier who uses environment-friendly process of production (renewable energy, low fuel consumption technology, etc)

3. Information related to department's schemes and programmes

- 3.1 Generate a list of the schemes and programmes of the department that are being implemented in the block
- 3.2 Take each of the programmes and schemes and ask the representative to assess these programmes in terms of their ability to:
 - (e) Strengthen natural resource base
 - (f) Efficient use of energy
 - (g) Reduced emissions of Green House Gas



(h) Use of renewable energy

3.3 What are the procurement procedures for materials and supplies under the programmes and schemes with respect to:

- (d) Types of materials procured
- (e) centralised-decentralised procurement
- (f) parameters for identifying the supplier (cost, quality etc)

Are there considerations of procuring materials from the supplier who uses environment-friendly process of production (renewable energy, low fuel consumption technology, etc)

4. Convergence with NREGS

4.1 What are the possibilities of converging the department's programmes with NREGS:

- (a) planning for works in terms of choice and location of works
- (b) supplementing/complementing in works and creation of assets
- (c) sharing of resources
- (d) value additions by sharing use of assets created

4.2 If there are possibilities for convergence, what would be the appropriate process which would promote and strengthen such convergence?

Annex 5: Technical note on scoring and weights

The methodology adopted for scoring comprised the following five steps:

(a) Development and Finalisation of Indicators

The indicators for Decent Work and environment friendliness were finalised in the context of NREGS. The process of finalisation involved peer group consultations, especially with personnel involved in implementation of the Scheme.

(b) Generating Options for each Indicator

Three possible options for each indicator were developed. The first option reflected the minimal state of achievement of the indicator and the third option reflected the ideal state. Consequently, option one was assigned a score of 1, option two a score of 2 and option three a score of 3. Higher score implied higher levels of achievement for the indicator. For example for the indicator Timely Payment in case of Decent Work option one was wages received after 15 days of work done, option two was wages received within 7 to 15 days of the work done and option three was wages received within one week of the work done. These options were developed in reference to the Operation Guidelines of the NREGS that stipulated that as far as possible the wages should be paid within seven days and in no case after 15 days of the work done. Consequently, option three was given a score of 3 and option one a score of 1.

(c) Assessing Indicator

Indicator assessment was undertaken by the researchers based on their field observation, Focus Group Discussion and interface with the members of the implementing agency. Secondary data was also analysed for assessment of the indicator. The assessment resulted in the choice of option for each particular indicator.

(d) Assigning Weights

The study recognised that given the nature of the NREGS, all the indicators are not of equal importance. For example, the main purpose of the scheme is to guarantee employment for 100 days for unskilled work. Hence indicators that relate to employment were given greater importance than other indicators by assigning a score of 4 to each of indicators related to employment and a score of 2 to each of the other indicators. Similarly in case of environment friendly indicators the protection of eco systems and development of eco system services was given greater importance by assigning a score of 5 and to Energy Efficiency a score of 2 and the remaining indicators a score of 1 each.

(e) Weighted Scores

The weights assigned to each of the indicators were added to the score achieved by the particular indicator to arrive at the weighted score. For example, the table 8 containing basic scores has been elaborated to demonstrate how the weighted score has been arrived at for the Decent Work Indicators.

<i>Decent Work Indicators and Scores obtained for Three Major Nature of Works and Detailed Calculation for Arriving at Weighted Score</i>											
<i>S. No</i>	<i>Indicator</i>	<i>Percentage Weight</i>	<i>Type of Work (Score)</i>								
			<i>Rural Connectivity</i>			<i>Minor Irrigation</i>			<i>Water Conservation</i>		
			<i>Acquired Score</i>	<i>Calculation for arriving at weighted score</i>	<i>Weighted Score</i>	<i>Acquired Score</i>	<i>Calculation for arriving at weighted score</i>	<i>Weighted Score</i>	<i>Acquired Score</i>	<i>Calculation for arriving at weighted score</i>	<i>Weighted Score</i>
1	Employment Indicators	40%	12		32	12		32	12		32
1.1	Days of Employment realized against demand for employment		3	3+4	7	3	3+4	7	3	3+4	7
1.2	Place of Work		3	3+4	7	3	3+4	7	3	3+4	7
1.3	Nature of Work		1	1+4	5	1	1+4	5	1	1+4	5
1.4	Realisation of Minimum Wages		3	3+4	7	3	3+4	7	3	3+4	7
1.5	Timely payment of Wages		2	2+4	6	2	2+4	6	2	2+4	6
2	Social Protection	20%	4		10	4		10	4		10
2.1	Insurance Coverage Ratio		1	1+2	3	1	1+2	3	1	1+2	3

2.2	Provision for Rest and related facilities at worksite		2	2+2	4	2	2+2	4	2	2+2	4
2.3	Child Care Facility		1	1+2	3	1	1+2	3	1	1+2	3
3	Social Dialogue	20%	3		9	3		9	3		9
3.1	Presence of Labour Groups		1	1+2	3	1	1+2	3	1	1+2	3
3.2	Participation in Planning		1	1+2	3	1	1+2	3	1	1+2	3
3.3	Awareness Programme on HIV/AIDS		1	1+2	3	1	1+2	3	1	1+2	3
4	Rights	20%	15		27	16		28	17		29
4.1	Incidence of Child Labour		3	3+2	5	3	3+2	5	3	3+2	5
4.2	Hours of Work and its seasonal distribution		2	2+2	4	2	2+2	4	2	2+2	4
4.3	Incidences of Discrimination		1	1+2	3	2	2+2	4	3	3+2	5
4.4	Employment to Scheduled Castes		3	3+2	5	3	3+2	5	3	3+2	5
4.5	Employment to Scheduled Tribes		3	3+2	5	3	3+2	5	3	3+2	5
4.6	Employment to Women		3	3+2	5	3	3+2	5	3	3+2	5
	TOTAL		34		78	35		79	36		80

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