



# **Evaluating and Greening Rural Development in India**

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*Economic Instruments for Greening Development: SANDEE-PEI Workshop*

Paro, Bhutan

August 13-14, 2012

**Varad Pande**

*Ministry of Rural Development  
Government of India*

# Agenda

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- **Major Rural Development Programmes in India**
- **Monitoring & Evaluation Today**
- **Monitoring & Evaluation Proposed – Concurrent Evaluation Office**
- **Greening Rural Development**
- **Evaluating the Mahatma Gandhi NREGA**
- **Conclusions**



# Major Rural Development Programmes in India

- **Social Safety Nets**

1. Employment (MNREGA)
2. Pensions (NSAP)

- **Rural Infrastructure**

3. Rural Roads (PMGSY)
4. Housing (IAY)
5. Drinking Water (NRDWP)
6. Sanitation (NBA)

- **Skill Development & Livelihoods**

7. Aajeevika (NRLM)

- Funding by Central Government, Implementation by States
- Annual Budget ~Rs 99,000 crore (~USD 20Bn)

# Agenda

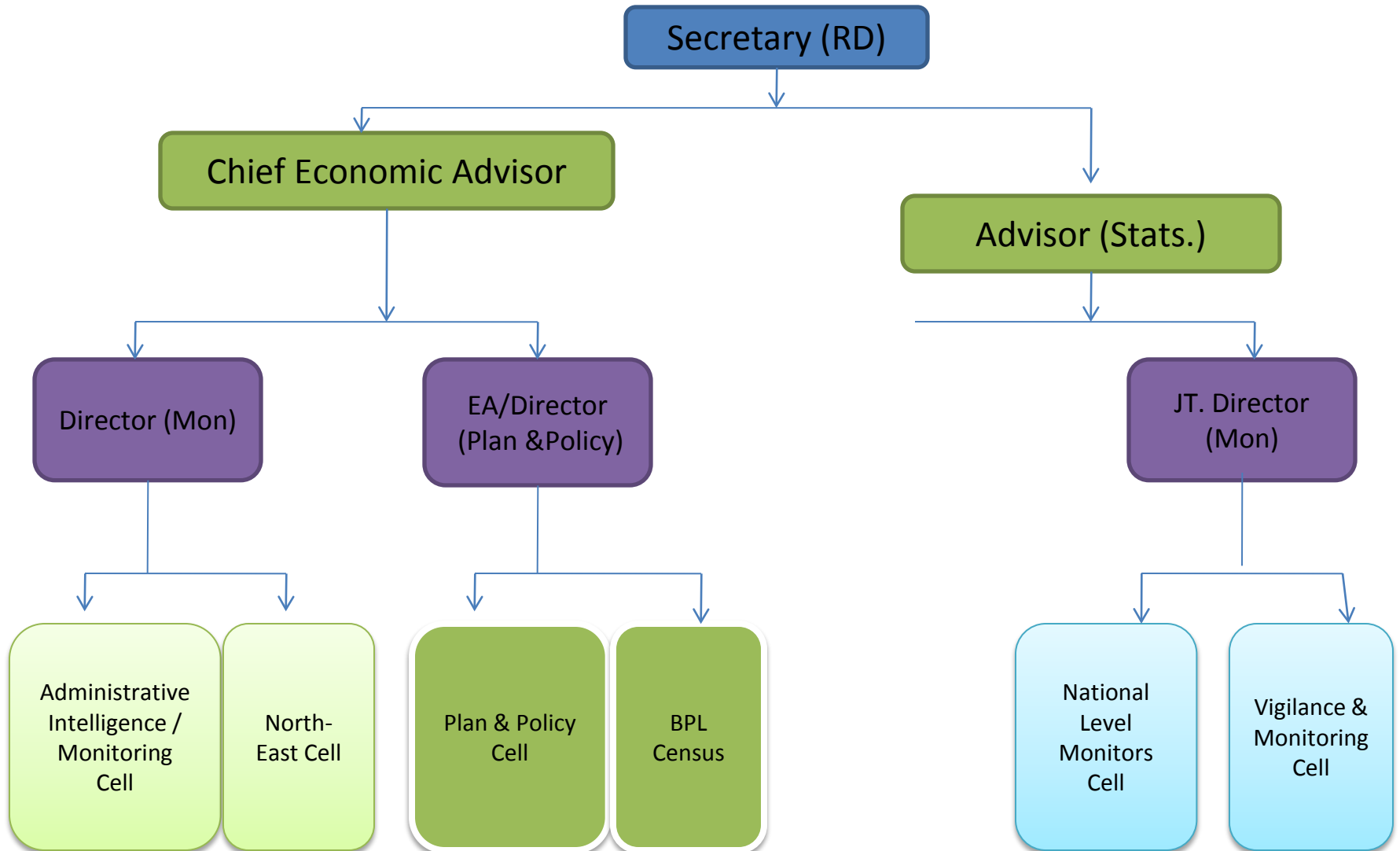
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# M&E Today

## Comprehensive structure in place....





## ...many initiatives...

- Online monitoring: MIS systems
- Field level monitoring: National Level Monitors, Area Officers
- Occasionally, Independent evaluations
- State governments and districts have their own monitoring mechanisms



## But...several weaknesses

- Expenditure Obsession
  - Accountability of States is on “spending”, no real incentives/disincentives for achievements of outcomes
- Focus on Monitoring, not Evaluations
- Evaluations ad hoc and ex-post, not Concurrent
  - No baselines, needs assessments, feasibility analysis
  - No consolidated/collective view of achievements across programmes
- Policy-loop is seldom closed
- Mission Creep...and Limited Capacity

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# M&E Proposed Concurrent Evaluation Office (CEO)



**An independent organization to facilitate systematic rapid and rigorous concurrent evaluations through a network of institutions - a Concurrent Evaluation Network (CENET)**



## **Functions**

1. Identify appropriate concurrent evaluations to be done
2. For each study
  - Design ToRs
  - Identify institutions to undertake studies
  - Coordinate implementation
3. Identify learning and recommend policy changes
4. Review the "Action Taken Reports" of the Ministry
5. Disseminate findings and datasets



## A Dual Challenge

*On the one hand...*

CEO should be **independent** and **professional**

*On the other hand...*

CEO work should do **relevant** work, and make an **impact** into policy



**How to reconcile these seemingly conflicting objectives?**

# M&E Proposed Concurrent Evaluation Office (CEO)



## Independent & Professional

1. Formed as an independent society, not as a department/cell in the Ministry
2. Professional Governing Body with 5 independent experts
3. Director-General to be a Professional Economist with full functional autonomy and budget
4. Core Team (Researchers/YPs) hired from 'market', other services outsourced



## ...Yet Embedded in the System

1. Governing Body to have RD Ministry, Planning Commission, States representatives
2. Chief Economic Advisor to play dual role (Ministry and CEO)
3. Formal Consultation Process with Ministry and agreed Annual Work Plan codified as an MoU
4. Concept of 'Action Taken Reports' to be prepared by Ministry on recommendations of CEO

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- Largest Spending Ministry of Government (Budget of USD20Bn a year)
- Already has a major “green” imprint
  - e.g., ~70% of work under MGNREGA are water/environment related
- Want to measure + scale-up “green” impact



- In-depth life-cycle study of all programmes of Ministry to identify areas for “greening” (in partnership with UNDP)
- Make changes to government policies and guidelines to make it happen



- 1. Improving quality and carrying capacity of ecosystems**
  - Water in surface bodies, aquifers and soil profile
  - Improving quality of vegetative and soil cover
  - Arresting degradation of natural resources: e.g., water pollution,
  - Strengthening water cycle, nutrient cycle, natural propagation of vegetative species
  - Including capacity for carbon sequestration and soil carbon
  
- 2. Strengthening ecosystem resilience**
  - Enabling ecosystems to recover from extreme weather events
  - Enabling ecosystems to cope with gradual climatic changes
  
- 3. Enabling sustainable livelihoods**
  - Based on environmentally sustainable use of natural resources, including improved land use management
  
- 4. Reducing the ecological footprint of interventions**
  - Through efficient use of energy, materials and natural resources
  - Increased use of renewables and of locally available materials
  - Reducing generation of environmentally polluting substances

# Greening Rural Development Project Plan



← May 2012 →



- Discuss emerging thinking and experiences in “greening” globally and nationally
- Discuss environment implications and potential of India’s rural development programmes
- Discuss strategies for integrating “green” considerations and objectives into these programmes, as well as ideas for new programmes

← Jun-Aug 2012 →



- Identify a broad set of “green” outcomes
- Review key programmes from environmental perspective:(a) Assess environment implications, (b) Examine potential to address env. issues, build resilience, etc.
- Document successful models within and outside India
- Make recommendations for integrating “greening” considerations into current programmes and ideas for new prgms

← Sep-Dec2012 →



- Developing pilot projects on the ground
- Modifications to programme guidelines to make them greener
- Setting the institutional framework for incorporating “greening” considerations across programmes
- Capacity development of implementation teams (training material, training, ICE)

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# Mahatma Gandhi NREGA

## Key Features

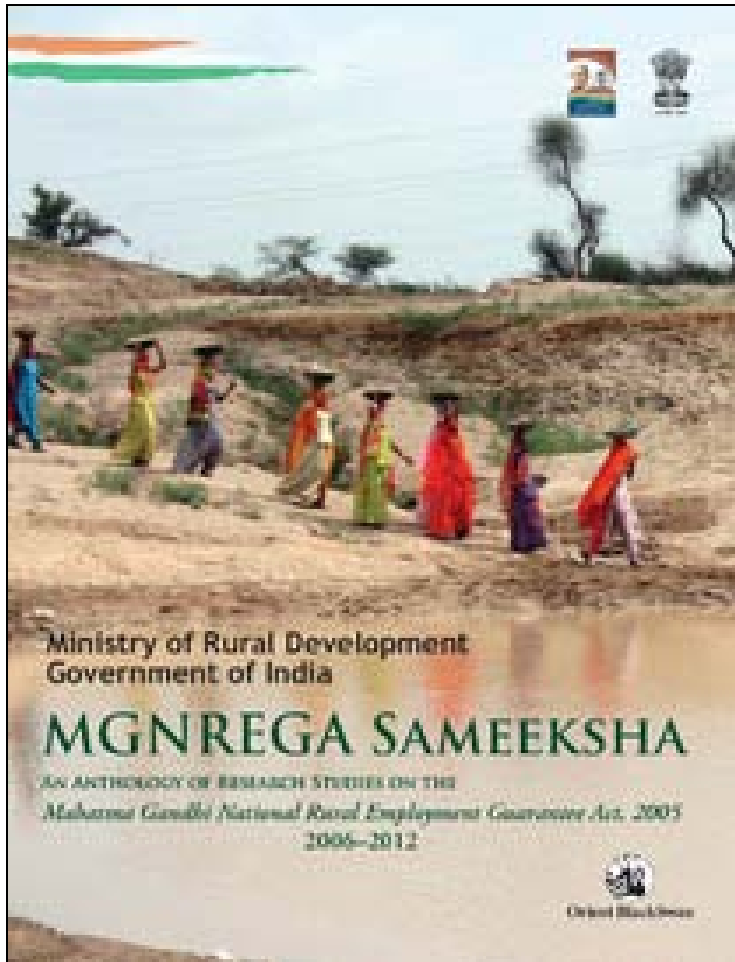


- **Legal Guarantee**: 100 Days of guaranteed employment to all those who are willing to work
- **Demand driven**: If a citizen asks for a job, State guarantees that a job will be provided, at a fixed minimum wage within 15 days
- **Bottom-up**: Works chosen by village assembly (Gram Sabha) and programme administered by village council (Gram Panchayat)
- **Community Asset Creation**: Create useful social assets



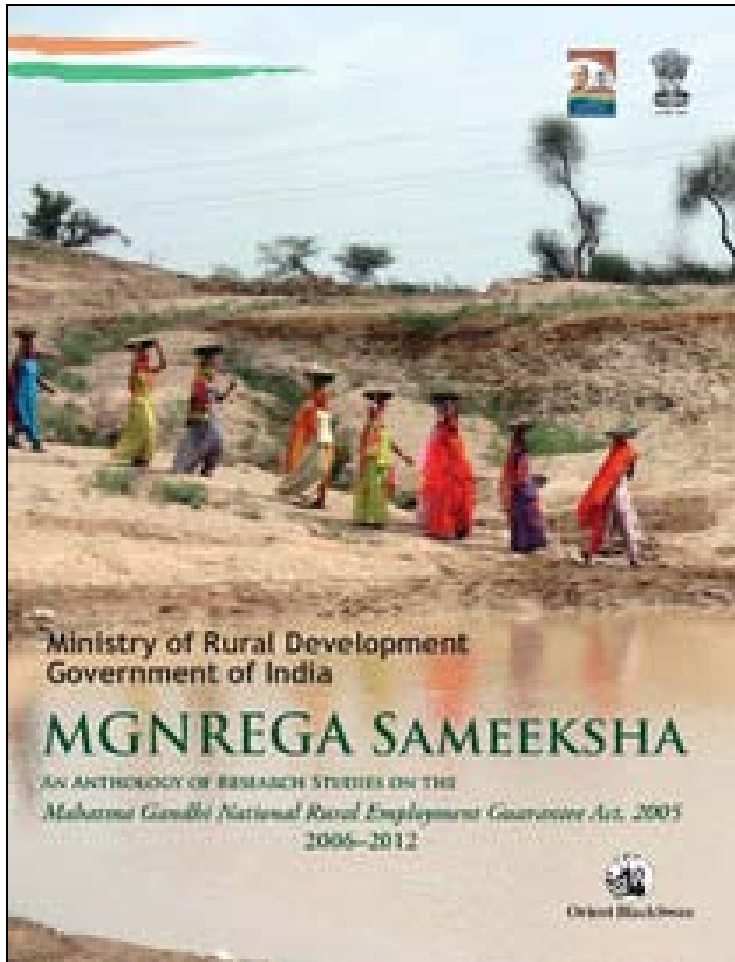
**Twin Objectives: Safety Net + Asset Building**

# Mahatma Gandhi NREGA MGNREGA Sameeksha



- First Anthology of independent Evaluation Studies (2006-2012), released by India's Prime Minister on 14<sup>th</sup> July 2012
- Organised into seven chapters:
  - 1: Income and Livelihood Security
  - 2: Gender and Social Empowerment
  - 3: Sustainable Asset Creation
  - 4: Environment Services and Agricultural Productivity
  - 5: Labour Market and Migration
  - 6: Governance/Process Challenges
  - 7: Recent Initiatives to Strengthen MGNREGA
- Detailed Bibliography for Researchers

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# Mahatma Gandhi NREGA

## Impact on Environment Services and Agricultural Productivity



**TABLE 3.1 Total Works Taken Up under MGNREGA**  
FY 2006–07 to FY 2011–12\*

S.No. Type of Works	Total Number of Works Completed from FY 2006–07 to FY 2011–12* (In Lakh)	Ongoing works (In Lakh)	% of Total Works taken up from FY 2006–07 to FY 2011–12*
i. Water Conservation and Water Harvesting (e.g. farm ponds, percolation tanks, etc.)	19.5	36.4	25
ii. Flood Control and Protection (e.g. check dams, culverts, etc.)	3.9	5.9	4
iii. Drought Proofing (e.g. afforestation/tree plantation, agro-forestry, etc.)	5.2	13.0	9
iv. Irrigation Canals (macro- and micro-irrigation works, etc.)	5.7	9.5	7
v. Renovation of Traditional Water Bodies (e.g. desilting of tanks, etc.)	6.6	9.8	7
<b>Total Water Conservation and Water-related Works (sum of (i) to (v) above)</b>	<b>40.9</b>	<b>74.7</b>	<b>51</b>
vi. Works on lands of SC/ST/ BPL/ SMF and IAY and Land Reform Beneficiaries	13.0	19.9	14
vii. Land Development (e.g. contour bunds, field bunds, etc.)	13.9	18.8	13
viii. Rural Connectivity (e.g. village roads, etc.)	16.0	28.3	19
ix. Others (e.g. Bharat Nirman Kendras)	2.8	4.6	3
<b>Total Works</b>	<b>86.6</b>	<b>146.3</b>	<b>100</b>

Two-thirds of all works relate to water or land development



Is MGNREGA the world's largest climate-resilience programme?

# Mahatma Gandhi NREGA Impact on Environment Services and Agricultural Productivity

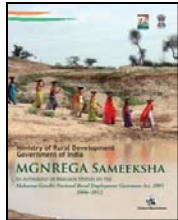


**TABLE 4.1 MGNREGA Activities and Key Environmental Services**

MGNREGA Activities	Local Environmental Services	Regional and Global Environmental Services
<b>Water Conservation and Harvesting</b>	Groundwater recharge, soil moisture retention and protection (erosion control), flood control (reduced risk), providing irrigation and drinking water and improving soil quality (nutrient cycling)	Water conservation
<b>Irrigation Provisioning and Improvement</b>	Providing irrigation, improved-agriculture and livelihoods, increased crop production	Reduce the need for methane producing large dams
<b>Renovation of Traditional Water Bodies</b>	Improved storage capacity, irrigation availability, groundwater recharge, soil quality (nutrient cycling), biomass production and crop production	Water conservation
<b>Land Development</b>	Land reclaimed for agriculture, improved-irrigation availability, hence agriculture and livelihood improvement	
<b>Drought Proofing</b>	Soil moisture retention, protection (erosion control) and soil quality (nutrient cycling), flood control (reduced risk), biomass production (fuel wood) and local climate regulation	Water conservation, carbon sequestration, biodiversity conservation
<b>Flood Control</b>	Better drainage, higher land productivity (erosion control) and flood control (reduced risk)	Water conservation

# Mahatma Gandhi NREGA

## Impact on Environment Services and Agricultural Productivity



### 1. Enhancement of Environmental Services

Studies indicate that MGNREGA works have led to

- Improvement in water-percolation and rise in groundwater,
- Improvement in soil quality and
- Reduction in vulnerability of production systems to climate variability (by strengthening livelihood and water security)
- Potential for carbon sequestration

### 2. Creation of Green Jobs

- MGNREGA employment is 'green' and 'decent', providing social protection and environmentally sustainable works that regenerate ecosystems and protect bio-diversity
- The true potential of MGNREGA as a Green Scheme can be realised if additional parameters are included in planning and implementation, to focus on activities specifically from environment sustainability lense, such as use of resource efficient materials

### 3. Agricultural Productivity

Impact of MGNREGA on agricultural production/productivity not uniform

- Areas which have performed better in the MGNREGA implementation demonstrate a visible growth in agri production/productivity through improved irrigation, better cropping patterns, enhanced productivity
- More research required to quantify impact on agri production/productivity at macro-level

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## Conclusions

- Government-led Rural Development programmes have a large ‘footprints’ in developing countries like India
  - Provide huge canvas for rigorous evaluations, feeding into policy
  - Also provide major potential for “greening” policies and achieving green outcomes
- Environmental evaluations of rural development programmes are still very niche
  - Some interesting insights...but mostly micro-studies
  - Much more work – rigorous and at larger scales – needs to be done



# APPENDIX

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# Major Rural Development Programmes in India

## Scale of the Operation



- **Social Safety Nets**

- Employment (MNREGA): Rs 33,000crores (USD 6.6Bn)
- Pensions (NSAP): Rs 8,400crores (USD 1.7Bn)

- **Rural Infrastructure**

- Rural Roads (PMGSY): Rs 21,700crores (USD 4.3Bn)
- Housing (IAY): Rs 10,000crores (USD 2.0Bn)
- Drinking Water (NRDWP): Rs 10,500crores (USD 2.1Bn)
- Sanitation (TSC): Rs 3,500crores (USD 0.7Bn)

- **Skill Development & Livelihoods**

- Aajeevika (NRLM): Rs 3,500crores (USD 0.7Bn)

- **Others**

Rs 5,000crores (USD 1.0Bn)

**TOTAL Rs 99,000crores (USD 19.9Bn)**

**Works out to ~Rs 1,250 (USD25) per rural Indian**

# Mahatma Gandhi NREGA

## Key Findings from Evaluations



### 4 clear positives

1. Agricultural wages have gone up (most important determinant of rural poverty)
2. Distress migration has come down
3. Visible evidence of community assets being created
4. (intangible) Empowerment of the weakest sections

### 4 areas for improvement

1. Implementation is patchy, payments are delayed
2. Funds-tracking is weak. Fraudulent transactions
3. Quality of assets created is often poor, too much emphasis on kuchha roads
4. Weak capacity of gram panchayats / gram sabhas



**Moving towards MNREGA 2.0**