

Greening Rural Development in India



Greening does more than just improve the environment—it contributes to better economic growth

UNDP's report shows that greening the Government's rural development schemes will have positive economic impact because greening will:

- **contribute** to inclusive local growth
- **improve** environmental sustainability
- **help** to make communities more resilient to natural disasters
- **help** to make public expenditure more effective

Greening rural development will contribute to inclusive local growth in five ways by:



Greening will provide new business opportunities for rural entrepreneurs

- **improving** agricultural productivity through increased yield response to fertilizers and water availability for irrigation
- **increasing** private investment in clean technology and green resources
- **increasing** incomes for the rural poor through green value-chains and markets
- **increasing** returns on investment through improved ecosystem services in aquaculture, fisheries and infrastructure in flood prone regions
- **reducing** the economic costs from natural disasters by strengthening local resilience

Greening rural development will improve environmental sustainability in three ways by:



Greening will help to conserve groundwater in hard-rock regions, which occupy 70% of India's landmass

- **conserving** water quality and quantity through increased water use efficiency in agriculture, construction and drinking water and by reducing the pollutant load in sanitation waste
- **improving** vegetative cover and biodiversity
- **reducing** soil erosion and increasing soil carbon

Greening rural development will help to make communities more resilient to natural disasters in four ways by:



Greening will significantly reduce cattle and agricultural losses from drought and flooding



- **reducing** the impact of drought through water harvesting, resilient cropping and secure drinking water and fodder supply
- **reducing** the impact of floods through better drainage, resilient cropping and flood resilient systems for drinking water and sanitation services
- **reducing** the disease burden through safe disposal of sanitation waste and water contaminants, cleaner habitats and less use of chemical fertilizers
- **conserving** biodiversity and protecting sustenance resources for the rural poor, including health and shelter inputs and productive resources including fibres, dyes, oils and resins

Greening rural development will help make public expenditure more effective over the medium term in five ways by:



Pragatyanamam bhava.
Sambhavam bhava.



Greening is likely to have a positive impact public expenditure over the medium-term

- **making** assets created through public expenditure more durable
- **reducing** outlays on schemes aimed at poverty reduction through better livelihoods for the poor and better food and nutrition security
- **reducing** the need to reinvest in water provision in 'slipped back' habitations
- **reducing** expenditure on relief and recovery in disaster prone communities
- **reducing** the need for subsidies on fossil fuels because of improved energy use in housing, roads, water supply and on fertilizers because of improved soil fertility and increased use of non-chemical fertilizers

To make its schemes and missions green, the Ministry of Rural Development may wish to:



Most of these steps can be
done quickly and at little cost

- **develop** green guidelines for each scheme and establish a green cell to guide and support greening across schemes
- **establish** an Green Innovations Fund and an Innovations portal that: a) registers demand for green solutions b) invites technology providers to develop solutions and c) serves as a databank for green solutions
- **establish** a network of district and state level support organizations to facilitate implementation and monitoring of green plans and results
- **develop** green indices and evaluate green results on a regular basis
- **establish** an incentive system to encourage green results
- **prepare** an Annual Green Report on progress

UNDP stands ready to support the Ministry of Rural Development by helping to design:



UNDP has global expertise in greening and is ready to provide technical support if requested

- tools and a methodology for measuring and reporting on green results
- a Green Innovations Fund that channels financial support for new technologies
- an innovations portal that will identify demand for green technology and link technology solutions with providers
- an incentive system to encourage key decision makers within rural development schemes and missions to improve green outcomes

Greening MNREGP will help to conserve natural resources and sustain agricultural production systems and will:



- deliver local environmental benefits including improved soil fertility, recharged groundwater and improved vegetative cover
- enhance the resilience of natural and production systems through afforestation, soil and water conservation, disaster risk reduction
- deliver global environmental benefits including conserving biodiversity, sequestering carbon and reducing vulnerability to climate variability and change

MGNREGP can be greened by:



- preparing a perspective plan for every Gram Panchayat incorporating landscape and watershed based planning
- strengthening the capacities of Gram Panchayats to develop green proposals and monitor green results
- strengthening the capacities of block level officials to help implementing partners deliver green results
- developing an MGNREGS green index to monitor green impact
- incentivizing Gram Panchayats to reach the threshold level on the green index

Greening NRLM will accelerate the shift towards livelihoods based on green agriculture, non-timber forest produce and off-farm resources and will help to:



- establish a national niche and premium market for sustainably harvested produce that provides higher income to rural producers
- strengthen livelihoods based on sustainable harvest of non-timber forest produce
- encourage rural farmers to adopt organic and low-chemical agriculture
- support the development of a supply chain for green inputs and advisory services for agriculture

NRLM can be greened by:



- defining a green outcome for each Mahila Kisan Sashaktikaran Pariyojana guideline on sustainably harvested produce and sustainable agricultural practices
- developing protocols for sustainable harvest of NTFPs, sustainable agriculture and livestock management
- earmarking 2% of the overall budget for work on developing niche and premium markets for sustainably harvested produce and for green input supply chains
- Providing a back-loaded labour subsidy to self-help groups to adopt sustainable practices to compensate for lower labour productivity during a transition period

Greening IAY will increase resource use efficiency and reduce negative environmental impact and will help to:



- increase resource use-efficiency in housing construction through better use of building materials, water, energy
- increase environmentally sustainable use patterns through increased use of renewable building materials including bamboo and wooden structures
- reduce negative consequences through less use of water and energy in housing construction

IAY can be greened by:



- preparing region-specific Handbooks of Green Building Designs including green construction materials
- establishing district level Building Resource Centres to promote green technologies
- developing an IAY Green Index to measure, monitor and report on green results
- Providing an additional subsidy to families building housing units that score above threshold on the green index
- providing additional funds to districts committing to green housing units under IAY

Greening IWDP will expand green cover, improve sustainable water and livestock management and increase agricultural productivity and will help to:



- increase resource conservation by improving the quality of soils and vegetative cover
- expand environmentally sustainable use patterns by introducing green agronomy and reducing pollution from agriculture
- strengthen the resilience of communities to natural disasters by strengthening community institutions and expanding reliance on seed banks and local organic inputs

IWDP can be greened by:



- incorporating environmentally sustainable resource management and production systems in work plans and developing the capacities of community institutions to adopt these systems
- using funds for production systems and microenterprises to support sustainable production systems
- establishing indicators and targets for soil health, biodiversity and water resource sustainability
- formalizing usufruct rights and legal entitlements to promote sustainable use practices and releasing the 5% budget provision for the consolidation phase after these measures are adopted by the community

Greening NBA will lay the foundation for green villages and will help to:



Pragatichetana
Sustained Growth



- prevent solid and liquid wastes from entering the environment in their raw form
- segregate grey water from storm water runoff and its disposal

NBA can be greened by:



- establishing a Green Home Protocol and Green Panchayat Protocol to be implemented sequentially across the country
- increasing the budget for solid and liquid waste management
- Increasing the weight of solid and liquid waste management in the eligibility criteria for the Nirmal Gram Puraskar
- preparing an inventory of solid and liquid waste management technologies and disseminating them widely
- launching a campaign highlighting the tangible benefits of rural sanitation on health and livelihoods

Greening NRDWP will help to conserve and regenerate the resource base and reduce water wastage and will:



Pragatya
Sustaining
Sustaining
Sustaining



- improve the sustainability of drinking water sources
- increase the use of renewable energy through solar pumps, energy-efficient pumps and gravity-based systems
- promote technologies for treating contamination to ensure zero sludge generation and safe sludge disposal
- promote roof rain water harvesting

NRDWP can be greened by:



- ensuring source sustainability is built into the Resource Development Proposals from Gram Panchayats
- institutionalizing participatory water quality monitoring and reporting by Gram Panchayats
- ensuring safe disposal of contaminants after water treatment
- dedicating additional funds for the use of green technologies
- Incorporating water demand into Water Security Plans