

Potential of Green Jobs for Employment Generation in Rural Areas

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Abstract

Over the last two decades, green jobs have gained significant importance as countries worldwide have increasingly focused on sustainable development alongside employment generation. International environmental and occupational standards promoted by organizations such as International Organization for Standardization, including ISO 14001 for environmental management and ISO 45001 for occupational health and safety, have further strengthened the relevance of green employment across sectors. In a developing country like India, where a large proportion of the population resides in rural areas and depends heavily on natural resources for livelihoods, green jobs present a dual opportunity of employment creation and environmental protection.

The primary objective of this study is to examine the concept and significance of green jobs in the context of sustainable development. Secondly, the study aims to analyze whether green jobs have the potential to generate large-scale employment in rural India. Thirdly, it seeks to identify key sectors that can effectively support green employment opportunities. To achieve these objectives, the study is based on a comprehensive review of existing literature, including reports and policy documents published by international organizations and government agencies, as well as relevant academic research.

The findings of the reviewed literature indicate that sectors such as renewable energy, sustainable agriculture, waste management, water conservation, and environmental conservation have substantial potential to create employment opportunities in rural regions. These sectors not only support income generation but also promote responsible use of natural resources and long-term ecological balance. The study further highlights that appropriate policy interventions, focused investment in sustainable technologies, and targeted skill development initiatives are crucial for expanding green jobs in rural India. Strengthening institutional support and improving access to green skills can significantly enhance rural livelihoods while contributing to inclusive and sustainable economic growth.

Keywords: Green Jobs, India, Renewable Energy, Rural Employment, Sustainable Agriculture, Sustainable Development

Introduction

The alarming challenges of environmental degradation, changes of climate and depletion of resources, along with the increasing rate of unemployment and lack of secure livelihoods, made the countries across the world to rethink the traditional methods of economic development. As conventional strategies of growth mainly focuses on industrial expansion and economic output and poses limited attention to environmental sustainability and social inclusion. As a response to the challenges, the concept of sustainable development gains importance and becomes the arising need for the framework of green economy, within which the concept of green jobs have evolved as a emergence link between environmental protection and generation of employment opportunities.

The term Green jobs firstly gained importance globally in policy and academic discourse during 2000s, particularly through the efforts of international organizations such as the International Labour Organization and the United Nations Environment Programme. According to the International Labour Organization, “green jobs are decent jobs that contribute to preserving or restoring the environment, whether in traditional sectors such as agriculture and manufacturing or in emerging green sectors such as renewable energy and energy efficiency.” The definition highlights the two essential dimension of green jobs: environment sustainability and decent work, similarly United Nations Environment Programme explain green jobs as those that reduces the impact of industries and economic activities while improving the wellbeing of human and promoting social equity.

Various Academic literature has broadened the concepts of green jobs. Pearce, Markandya, and Barbier, in *Blueprint for a Green Economy*, describe green employment as a method or approach of aligning an economic activities within the limits of environment by promoting the efficient use of resources along the the environmental conservation. In the same vein Bowen and Kuralbayeva (2015) highlights that the concept of green jobs is not limited to only new sectors or industries but it has included the transformation of existing jobs through the adoption of environment friendly technologies and responsible production processes. These perspective indicates that green jobs have wider transformation in the course of work rather than constituting a defined category of employment.

Green jobs have taken on even greater significance in the context of global commitments toward climate action, carbon neutrality and sustainable development goals. Governments, businesses and international institutions increasingly view green employment as a path to simultaneously crisis-proof the planet while creating jobs. Green jobs span sectors including renewable energy, sustainable agriculture, waste management and recycling, green construction, forestry, water management and environmental services. Green growth strategies create job opportunities and increase resilience to climate shocks, especially in resource-based economies, according to the World Bank.

Green job possesses utmost importance in developing nations, such as India where rural communities make up a majority of the population and agriculture; utilitarian use of natural resources make up most people’s daily bread. Unemployment and underemployment, shrinking agricultural productivity and a susceptibility to the vagaries of weather continue to trouble rural India. Sustainable farming practices, land degradation and water scarcity have increased rural distress further. Green Jobs emerge as a strategic response in this context, providing an avenue for developing sustainable livelihoods through environmentally friendly economic activities that enhance productivity and preserve natural resources.

Rural India's green jobs potential is highest in renewable energy, sustainable agriculture, waste management, and environmental protection. Employment opportunities for operational and maintenance workers, and those in manufacturing, installation, and services will be available through sustainable energy (solar and wind) projects. Additionally, organic farming, agroforestry, and climate-smart agriculture strengthen employment, soil biotic and abiotic climate resilience. Policy Making bodies like NITI Aayog reiterate the importance of green infrastructure investment coupled with skill development of rural workers for involvement in the green sector. Green jobs are a new form of rural development, combining

environmental sustainability with social and economic development. Their potential is crucial for the development of rural areas. Green jobs will be critical for developing rural areas in countries like India, as economic activities are gradually shifting to a resource-efficient and low-carbon approach. Green jobs address rural unemployment and provide sustainable economic opportunities.

LITERATURE REVIEW

Government initiatives and environmental policies also contribute to fostering green jobs. According to research by Pegels (2010), positive policy frameworks and incentives could enhance investments in renewable energy and sustainable technology, creating jobs. Policy initiatives in India backed by institutions like Niti Aayog focus on renewable energy expansion, sustainable agriculture and green infrastructure for economic growth and environmental protection. These initiatives are designed to promote the uptake of green technologies while creating job opportunities for people in rural areas.

Skill Development And Training To Enable Workers Participation will be another important aspect of green employment. A study by Strietska-Ilina, Hofmann, Haro and Jeon (2011), maintains that the emergence of green industries necessitates a workforce equipped with suitable technical and environmental skills.

Many studies have been done by researchers on the contribution of renewable energy as a catalyst of green jobs. According to Bowen and Kuralbayeva (2015), investments in Renewable Energy Technologies (RETs), including solar and wind energy, can create many jobs in both developed and developing countries. Manufacturing, installation, functioning, and maintenance of renewable energy systems requires labor from these sectors. In countries like India, where solar energy has high potential, rural renewable energy projects can enhance employment opportunities, ensure electricity access, and promote better energy use.

In addition, research has also shown the socio-economic benefits of green jobs. According to Sovacool, Ryan and Stern (2016), jobs both direct and indirect are created with renewable energy and sustainability initiatives. Opportunities exist for jobs in the fields of manufacturing, construction, installation, maintenance and service related to green technology. These initiatives create job opportunities in rural communities and lead to improved standards of living, access to energy and conservation.

The green economy transition in India has considerable consequences for rural job creation in the country. A Large portion of the Indian population lives in rural areas and agriculture and natural resource-based occupancy are the backbone of their livelihood. The incapacity to overcome hurdles like unemployment, underutilization, and environmental damage are still hampering rural development Scientists have been paying attention to green employment which can not only generate income but also conserve nature in order to avert environmental degradation along with climate change among others. Organizations like the World Bank show that investing in renewable energy, climate-resilient agriculture, and sustainable infrastructure can create jobs while protecting the environment. These initiatives can foster development by creating opportunities and preventing the rural-urban migration.

Sustainable agriculture is an important area that has often been seen as a leading source of green jobs in rural areas. The Food and Agriculture Organization emphasizes that other approaches that can enhances soil fertility and become an aid in biodiversity conservation can includes organic farming, agroforestry, climate-smart agriculture , which help in creating generating more jobs for rural people. By increasing use of of organic farming and other eco-friendly agricultural activities gives new income-generating options to rural workers while reducing the dependence on chemical fertilizers and pesticides (Singh and Kumar, 2020). Using crop models that incorporate climatic parameters for crop phenology, growth, yield prediction and natural resource management.

The above literature suggests that green jobs can help to address the rural unemployment issue while contributing to sustainability. Through the expansion of renewable energy projects, promotion of sustainable agricultural practices, and

investment in skill development programmes, opportunities can be created for green employment. As the global economy pivots towards sustainability and climate action, green jobs are rapidly becoming a core part of rural economic development strategies in countries like India.

Objectives of the Study

The main objectives of the present study are as follows:

1. To understand the concept and examine the potential of green jobs for employment generation in rural India.
2. To identify the key sectors contributing to green job creation.

Research Methodology

This study follows a descriptive and analytical research design to systematically examine the concept, significance, and employment-generating potential of green jobs in rural India. The methodology has been structured to ensure academic rigor and clarity, with a focus on understanding policy frameworks, sectoral opportunities, and sustainability outcomes associated with green employment.

The research is primarily qualitative in nature and is based on the analysis of secondary data. Data have been collected from reliable and authoritative sources, including reports and publications of international organizations, government policy documents, research articles published in peer-reviewed journals, working papers, and official websites related to sustainable development, rural employment, and green jobs. In addition, internationally recognized standards issued by the International Organization for Standardization, particularly ISO 14001 (Environmental Management Systems) and ISO 45001 (Occupational Health and Safety Management Systems), have been reviewed to understand the institutional and regulatory context supporting green employment.

Findings of Objective 1

(To understand the concept and examine the potential of green jobs for employment generation in rural India)

The detailed analysis of literature supported by employment data clearly establishes that green jobs represent a transformative approach to employment generation, particularly in rural India. Green jobs are conceptualized as employment opportunities that contribute directly to environmental sustainability while ensuring decent working conditions and long-term livelihood security. According to the International Labour Organization, green jobs help reduce environmental degradation while promoting productive and socially inclusive employment. This dual objective is especially relevant in rural India, where economic activities are closely linked to natural resources and environmental conditions.

Recent real-time employment data reveal the growing scale of green job creation in India, with a significant rural footprint. According to the International Renewable Energy Agency, India's renewable energy sector employed approximately 1.02 million people in 2023. The majority of these jobs were created in rural and semi-rural regions, as renewable energy projects such as solar parks, wind farms, biomass plants, and small hydropower projects are typically located outside urban centers. Hydropower alone generated around 453,000 jobs, largely in hilly and rural regions, while solar photovoltaic projects created nearly 318,600 jobs, many of which involved local rural labor for installation, operations, and maintenance. Wind energy and biomass-based power further contributed tens of thousands of jobs, particularly in agrarian regions where biomass residues are readily available.

The potential of green jobs in rural India is further reinforced by data from the agriculture sector, which continues to employ over 50 percent of India's rural workforce. Research indicates that the adoption of sustainable agricultural practices—such as organic farming, agroforestry, integrated pest management, and climate-smart agriculture—significantly increases labour demand compared to conventional farming methods. These practices require greater human involvement in soil management,

crop diversification, water conservation, and post-harvest processing, thereby generating additional employment while improving ecological outcomes. Studies from Shodhganga highlight that organic and sustainable farming systems not only create more on-farm employment but also support allied rural activities such as composting, bio-input production, and agri-processing.

In addition, rural waste management and environmental conservation initiatives have emerged as important sources of green employment. Village-level solid waste management, composting units, biogas plants, and water conservation projects create jobs for local communities in collection, segregation, processing, and maintenance activities. According to policy studies supported by the World Bank, investments in nature-based solutions and green infrastructure can generate multiple jobs per unit of investment, particularly in rural economies where labour intensity is high and capital intensity is relatively low.

The findings also indicate that green jobs generate both direct and indirect employment in rural areas. Direct employment includes jobs in renewable energy production, sustainable farming, waste management, and conservation activities. Indirect employment arises through supply chains, transportation, local manufacturing, repair services, and skill-based rural enterprises supporting green sectors. This employment diversification reduces rural income volatility, strengthens resilience to climate and market shocks, and curbs distress-driven rural-urban migration.

Findings of Objective 2

(To identify the key sectors contributing to green job creation)

The review of academic literature, policy documents, and empirical studies clearly identifies several key sectors that play a significant role in green job creation. The findings indicate that green employment is multi-sectoral in nature and spans across traditional as well as emerging industries that integrate environmental sustainability with economic development. These sectors are widely recognized in both national and international literature as the core pillars of the green economy.

Table 1 : Potential Green Job Roles for Employment Generation in Rural India

| S. No. | Sector | Green Job Roles |
|--------|-------------------------|-------------------------------------|
| 1 | Renewable Energy | Solar Panel Installer |
| | | Solar PV Technician |
| | | Wind Turbine Technician |
| | | Biomass Plant Operator |
| | | Biogas Plant Supervisor |
| | | Renewable Energy Maintenance Worker |
| | | Rural Energy Service Technician |
| 2 | Sustainable Agriculture | Organic Farmer |
| | | Agroforestry Worker |
| | | Climate-Smart Agriculture Assistant |

| S. No. | Sector | Green Job Roles |
|--------|------------------------------|---|
| | | Soil Health Technician |
| | | Vermicomposting Worker |
| | | Bio-fertilizer Production Worker |
| | | Irrigation Efficiency Technician |
| 3 | Waste Management & Recycling | Solid Waste Collection Worker |
| | | Waste Segregation Assistant |
| | | Composting Unit Operator |
| | | Recycling Plant Worker |
| | | Biodegradable Waste Processor |
| | | Plastic Waste Recovery Worker |
| 4 | Water Resource Management | Rainwater Harvesting Technician |
| | | Watershed Development Worker |
| | | Water Conservation Assistant |
| | | Rural Water Quality Tester |
| | | Irrigation Canal Maintenance Worker |
| 5 | Environmental Conservation | Forest Conservation Worker |
| | | Nursery Development Assistant |
| | | Biodiversity Protection Worker |
| | | Eco-Restoration Assistant |
| | | Wildlife Habitat Maintenance Worker |
| 6 | Green Construction | Green Mason |
| | | Eco-friendly Building Worker |
| | | Energy-Efficient Construction Assistant |
| | | Sustainable Materials Handler |

| S. No. | Sector | Green Job Roles |
|--------|-------------------------|----------------------------------|
| 7 | Rural Green Enterprises | Organic Produce Marketing Worker |
| | | Renewable Energy Sales Agent |
| | | Eco-Tourism Guide |
| | | Rural Sustainability Trainer |
| | | Green Entrepreneurship Assistant |

Table 1 presents a comprehensive overview of green job roles across key sectors that exhibit strong potential for employment generation in rural India. The listed occupations are primarily labour-intensive and are closely linked to locally available natural resources, making them well suited to rural settings. These jobs are also location-specific, as activities such as renewable energy projects, sustainable agriculture, waste management, and environmental conservation are largely implemented in rural and semi-rural areas. Furthermore, the environmentally sustainable nature of these roles ensures that employment generation is aligned with ecological conservation and long-term resource efficiency. As a result, green jobs offer a viable pathway for absorbing the rural workforce while simultaneously supporting sustainable rural development and livelihood security.

The renewable energy sector emerges as one of the most important contributors to green job creation. Studies published by the International Renewable Energy Agency consistently highlight that renewable energy technologies such as solar, wind, biomass, and small hydropower generate employment across the entire value chain, including manufacturing, installation, operation, maintenance, and ancillary services. In the Indian context, research indicates that a large proportion of these jobs are created in rural and semi-rural areas where renewable energy resources are abundant. This makes renewable energy a critical sector for both environmental sustainability and rural employment generation.

Another key sector contributing to green job creation is sustainable agriculture. According to the Food and Agriculture Organization, sustainable agricultural practices such as organic farming, agroforestry, integrated pest management, and climate-smart agriculture enhance employment opportunities by increasing labour demand in soil management, crop diversification, water conservation, and post-harvest processing. Academic studies available on Shodhganga further emphasize that sustainable agriculture supports not only on-farm employment but also allied activities such as compost production, bio-input manufacturing, and agri-processing, thereby strengthening rural livelihoods while conserving natural resources.

The waste management and recycling sector has also been identified as a major source of green employment. Research indicates that environmentally sound waste management systems—covering waste collection, segregation, composting, recycling, and waste-to-energy initiatives—are highly labour-intensive. Policy reports and academic studies suggest that decentralized waste management models, particularly in rural areas, generate local employment while reducing environmental pollution and improving sanitation outcomes. These findings are strongly supported by studies referenced in policy documents of the United Nations Environment Programme.

The water resource management and environmental conservation sector is another critical contributor to green job creation. Literature highlights employment opportunities arising from watershed development programmes, rainwater harvesting projects, afforestation, biodiversity conservation, and ecosystem restoration initiatives. According to the World Bank, investments in nature-based solutions and green infrastructure generate high employment multipliers, particularly in rural

and resource-dependent economies. These activities require sustained human involvement and therefore create long-term employment while enhancing ecological resilience.

Additionally, the green construction and sustainable infrastructure sector contributes to green employment through the adoption of energy-efficient building designs, eco-friendly construction materials, and sustainable infrastructure practices. Studies suggest that green construction creates jobs for skilled and semi-skilled workers in areas such as green masonry, energy-efficient retrofitting, and sustainable material handling, with growing relevance in rural and peri-urban regions.

Overall, the findings clearly demonstrate that green job creation is driven by multiple interconnected sectors, including renewable energy, sustainable agriculture, waste management, water and environmental conservation, and green construction. These sectors are characterized by high labour intensity, strong rural linkages, and positive environmental outcomes. The reviewed literature strongly supports the conclusion that targeted policy interventions and investments in these key sectors can significantly expand green employment opportunities while promoting sustainable and inclusive economic development.

Findings of the Study

The study reveals that green jobs have emerged as a crucial instrument for promoting sustainable development while simultaneously addressing the problem of unemployment, particularly in rural areas. The concept of green jobs is widely understood as employment that contributes to environmental protection, resource conservation, and climate resilience, while also ensuring decent work and livelihood security. The literature reviewed confirms that green jobs are not limited to newly emerging industries but also involve the transformation of traditional rural occupations through the adoption of environmentally sustainable practices.

One of the major findings of the study is that green jobs possess significant potential for employment generation in rural areas due to the close linkage between rural livelihoods and natural resources. Rural regions offer favourable conditions for the growth of green sectors such as renewable energy, sustainable agriculture, waste management, water conservation, and environmental protection. These sectors are largely labour-intensive and location-specific, making them suitable for absorbing the rural workforce, including low- and semi-skilled labour.

The study further finds that the renewable energy sector is one of the largest contributors to green employment in rural areas. Solar, wind, biomass, and small hydropower projects generate employment across multiple stages, including manufacturing, installation, operation, and maintenance. Since these projects are predominantly located in rural and semi-rural areas, they provide local employment opportunities and reduce dependence on seasonal agricultural work.

Another important finding relates to sustainable agriculture, which continues to be a major source of rural employment. Practices such as organic farming, agroforestry, climate-smart agriculture, and water-efficient irrigation systems are more labour-intensive than conventional farming methods. These practices not only create additional employment but also improve soil health, water efficiency, and long-term agricultural productivity, thereby enhancing livelihood sustainability.

The study also highlights the growing role of waste management and environmental conservation in green job creation. Activities such as waste collection, segregation, composting, recycling, afforestation, watershed development, and biodiversity conservation generate steady employment opportunities in rural areas while contributing to improved environmental quality and public health.

Additionally, the findings indicate that green jobs contribute to both direct and indirect employment generation. Direct employment arises from activities directly linked to environmental sustainability, whereas indirect employment is created through supply chains, local enterprises, maintenance services, and green entrepreneurship. This diversification of employment sources enhances rural income stability and reduces distress-driven rural–urban migration.

Overall, the study concludes that green jobs have strong potential to serve as a sustainable pathway for rural employment generation. With appropriate policy support, investment in green technologies, and targeted skill development initiatives, green jobs can play a transformative role in promoting inclusive economic growth, environmental sustainability, and long-term livelihood security in rural areas.

Limitations of the Study

Despite providing valuable insights into the potential of green jobs for employment generation in rural areas, the present study is subject to certain limitations. Firstly, the study is based entirely on secondary data collected from published reports, policy documents, academic journals, and online sources. As a result, the findings depend on the accuracy, scope, and timeliness of the existing literature and do not incorporate primary field-level data from rural households or workers.

Secondly, the study adopts a qualitative and descriptive research approach, which limits the ability to quantify the exact magnitude of green job creation or measure sector-wise employment impacts using statistical models. The absence of primary surveys and econometric analysis restricts the scope for drawing causal inferences.

Thirdly, the study focuses broadly on rural areas and does not account for regional disparities across different states or districts in India. Variations in resource availability, infrastructure, policy implementation, and skill levels across regions may influence the actual employment potential of green jobs.

Another limitation of the study is that the availability of recent and disaggregated rural employment data related specifically to green jobs remains limited. Many green jobs are embedded within traditional sectors, making it difficult to distinctly identify and measure them in official employment statistics.

Finally, the study does not examine the challenges related to skill gaps, financing constraints, and implementation barriers in depth. Factors such as lack of technical training, limited access to capital, and institutional inefficiencies may affect the scalability of green jobs in rural areas but are beyond the scope of the present study.

Conclusion

The present study concludes that green jobs hold substantial potential for addressing the twin challenges of rural unemployment and environmental degradation. As economies increasingly shift towards sustainable development pathways, green jobs have emerged as an effective mechanism for integrating economic growth with ecological responsibility. The study establishes that green jobs are not confined to emerging industries alone but also involve the transformation of traditional rural occupations through the adoption of environmentally sustainable practices.

The findings indicate that rural areas are particularly well suited for green job creation due to their close dependence on natural resources and the availability of labour. Key sectors such as renewable energy, sustainable agriculture, waste management, water resource management, environmental conservation, and green construction offer significant opportunities for employment generation. These sectors are largely labour-intensive, location-specific, and environmentally sustainable, making them capable of absorbing the rural workforce while promoting long-term ecological balance.

The study further highlights that green jobs contribute to both direct and indirect employment in rural areas. While direct employment is generated through activities such as renewable energy projects and sustainable farming practices, indirect employment emerges through allied services, supply chains, and green enterprises. This diversification of livelihood opportunities enhances income stability, reduces rural vulnerability to climate and economic shocks, and helps curb distress-driven rural–urban migration.

Overall, the study concludes that green jobs can play a transformative role in promoting inclusive and sustainable rural development. However, realizing their full potential requires supportive policy frameworks, investment in green technologies, and targeted skill development initiatives for rural workers. With appropriate institutional support and

coordinated efforts, green jobs can become a cornerstone of sustainable employment generation and long-term rural prosperity.

REFERENCES

- Bowen, A., & Kuralbayeva, K. (2015). Looking for green jobs: The impact of green growth on employment. *Energy Economics*, 47, 1–14.
<https://doi.org/10.1016/j.eneco.2014.09.013>
- Food and Agriculture Organization of the United Nations. (2017). *Climate-smart agriculture sourcebook*. FAO.
- International Labour Organization. (2016). *What are green jobs?* ILO.
<https://www.ilo.org/global/topics/green-jobs/lang--en/index.htm>
- International Renewable Energy Agency. (2024). *Renewable energy and jobs – Annual review 2024*. IRENA.
<https://www.irena.org/Publications/2024/Sep/Renewable-Energy-and-Jobs-Annual-Review-2024>
- NITI Aayog. (2018). *Strategy for New India @75*. Government of India.
- NITI Aayog. (2022). *India's long-term low emissions development strategy*. Government of India.
<https://www.niti.gov.in/long-term-low-emissions-development-strategy>
- Pearce, D., Markandya, A., & Barbier, E. (1989). *Blueprint for a green economy*. Earthscan Publications.
<https://doi.org/10.4324/9781315066701>
- Pegels, A. (2010). Renewable energy in South Africa: Potentials, barriers and options for support. *Energy Policy*, 38(9), 4945–4954.
<https://doi.org/10.1016/j.enpol.2010.03.077>
- Singh, R., & Kumar, S. (2020). Sustainable agriculture and rural employment in India. *Journal of Rural Development*, 39(2), 215–230.
- Sovacool, B. K., Ryan, S. E., & Stern, P. C. (2016). Balancing costs and benefits of energy sustainability: A review of renewable energy employment impacts. *Energy Policy*, 88, 1–12.
<https://doi.org/10.1016/j.enpol.2015.10.002>
- Strietska-Ilina, O., Hofmann, C., Haro, M. D., & Jeon, S. (2011). *Skills for green jobs: A global view*. International Labour Organization.
- United Nations Environment Programme. (2011). *Towards a green economy: Pathways to sustainable development and poverty eradication*. UNEP.
<https://www.unep.org/resources/report/towards-green-economy-pathways-sustainable-development-and-poverty-eradication>
- United Nations Environment Programme. (2015). *Waste management outlook for Asia and the Pacific*. UNEP.
<https://www.unep.org/resources/report/waste-management-outlook-asia-and-pacific>
- World Bank. (2012). *Inclusive green growth: The pathway to sustainable development*. World Bank.
<https://openknowledge.worldbank.org/handle/10986/6058>
- World Bank. (2020). *Nature-based solutions for climate resilience and employment*. World Bank Group.
<https://www.worldbank.org/en/topic/environment/publication/nature-based-solutions>