

Creating Green Jobs in Developing Economies: Synergies, Challenges, and the Role of Donor-Funded Interventions

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Abstract- The transition to a global green economy presents developing countries with an opportunity to create sustainable jobs and mitigate climate risks. This article contends that green jobs are essential for socio-economic development in the Global South, where informal labour markets and natural resources are prevalent. Targeted green job initiatives can drive economic transformation by addressing key ecological and social challenges. The main arguments are: (1) green jobs are most effective where climate action and employment generation intersect, especially in renewable energy, the circular economy, and climate-adaptive agriculture; (2) progress is hindered by skills gaps, limited access to affordable finance, and fragmented policy environments; (3) donor-funded interventions—such as technical assistance, blended finance, and capacity building—are vital to overcoming these barriers; and (4) a just transition must include unorganized and vulnerable workers. The analysis highlights the need to align environmental goals with national development and poverty reduction strategies. A review of donor-led projects in Ghana, Nigeria, and Sierra Leone shows that while some interventions are effective, many are fragmented or lack robust monitoring, reducing their long-term impact. The article concludes with policy recommendations that stress the importance of coordinated national strategies and donor engagement to advance green job creation.

Keywords: *Green Jobs, Decent Work, Sustainable Development, Donor Interventions, Climate Resilience, Just Transition, West Africa, Ghana, Nigeria, Asia, Sierra Leone.*

I. INTRODUCTION AND BACKGROUND

The global economy is changing as countries address climate change and environmental degradation. For developing economies, this shift is both an ecological necessity and a path to sustainable development. The

main challenge is to promote economic growth and reduce poverty without relying on carbon-intensive industries. Green jobs, which combine environmental protection with decent employment, are central to achieving these goals.

The transition to a low-carbon economy could create approximately 18 million new jobs globally by 2030, with a significant share in developing countries. (A just transition to a green economy could create 14 million jobs in Asia and the Pacific, 2018) Realising this potential necessitates addressing substantial structural barriers. In developed economies, green jobs are mainly concentrated in professional and high-technology sectors. Conversely, green employment in developing countries is characterised by informality, limited capital, and insufficient infrastructure. (Porto et al., 2022) These factors shape the difficulties and possibilities examined in the following sections.

Developing economies face growing climate-related shocks that threaten rural livelihoods, especially in agriculture, and contribute to financial instability and migration. Creating green jobs is essential for building resilience and helping economies withstand environmental stressors. Donor-funded interventions play a crucial role by offering technical assistance and financial resources to bridge the gap between policy and implementation. This article explores the potential for green job growth and how international aid can support sustainable labour markets in the Global South.

Sub-Saharan African countries are confronted with escalating environmental issues, including forest loss, land degradation, and increasing climate risks, alongside persistent social issues such as high youth unemployment and widespread poverty (ILO, 2021a). Poverty worsens the overexploitation of natural

resources, further intensifying ecological and social problems. Green jobs, defined as employment that reduces energy and material consumption, lowers emissions and waste, restores ecosystems, and provides decent wages, offer a method to address these linked challenges (Renner et al., 2008, p. 4).

From 2021 to 2025, the Horn of Africa experienced one of its worst climate-related disasters, including five failed rainy seasons, changing ocean patterns, pest outbreaks, interrupted supply chains, and volatile prices, resulting in a major food crisis. By early 2025, over 60 million people faced food insecurity. ((FSIN) & (GNAFC), n.d.) The uneven distribution of risk across similar agricultural zones illustrated the need to assess how well local governments and systems can adapt and manage food supplies. (Ijirshar et al., 2025) A consortium of international organisations, including the FAO, CGIAR, World Bank, and AUDA-NEPAD, launched the Integrated Food Security Resilience Architecture (IFSRA). IFSRA aimed to determine whether combining multiple food security strategies produces better results than isolated climate-smart agriculture interventions. The framework focused on three main components:

Structural Strength Strategies: Strengthen food systems by cultivating climate-resilient crops, adopting protected farming methods, conserving water, and restoring land. Governments were required to incorporate these measures within climate plans and allocate at least 1.5% of GDP to land care by 2027.

Market and Trade Stabilisation Strategies: Establish grain reserves, create rapid-response funding, secure early import agreements, and use digital tools that integrate satellite crop data with market models. These actions aimed to reduce panic, prevent export bans, and stabilise food prices.

Household-Level Vulnerability Reduction Strategies: Implement climate-triggered safety nets, distribute food vouchers via mobile phones, and provide grants for climate solutions. Local leaders were responsible for linking beneficiary lists with real-time climate data to enable rapid assistance. A showed very different results. Countries that changed food laws and policies and worked with the program saw improvements in food supply of 19–27%. (Ghana: Building Resilience from Crisis - A new World Bank support to help the country recover from climate-related agricultural losses and guarantee its food future, 2025) They also saw reduced market turmoil and reduced the need for

emergency imports. Countries that relied solely on farming techniques without changing laws or systems had less success. They often faced problems with seeds or markets.

Another key issue emerged: even when new farming methods proved effective, weak coordination, political obstacles, and fragmented trade policies undermined food security. In 2025, the consortium concluded that food security cannot be addressed solely as an agricultural issue. It recommended shared-risk strategies, AI-based policy-testing tools, and mandatory reviews for major agricultural projects.

This article contends that green jobs are important to environmental protection and broader development goals. Its objectives are to: (1) define green jobs and their framework in relation to the Sustainable Development Goals (SDGs); (2) examine the function of international donors in green job initiatives; (3) analyze donor involvement in Ghana, Nigeria, and Sierra Leone to identify region-specific opportunities and barriers; and (4) propose policy solutions for sustainable, inclusive green job creation. The key arguments are presented at the outset and revisited in the conclusion for clarity.

II. FRAMEWORK AND LITERATURE REVIEW

2.1 Green Jobs in the Global South

"Green Jobs" has come a long way since it first entered the international policy discourse. The International Labour Organisation (ILO) provides an initial definition of green jobs as those that contribute to the preservation or restoration of the environment. This includes a sustainable economy (renewable energy), the circular economy, and climate-adaptive agriculture. The ILO notes that these separations rest on two pillars: the ability of the work to contribute to the environment and the quality of the work, typically defined as "decent work." In the Global South, this definition requires a more subtle understanding of the application. In the Global North, green jobs are frequently tied to public and private investment for technical innovation and engineering specialisation. These roles require advanced degrees and years of training. In developing economies, these definitions need to be broadened to include possible roles in subsistence and informal economies. For example, in intermediary cities in Asia and Africa, there may be informal waste management, urban agriculture, and

community-driven conservation work as green jobs. These jobs provide environmental benefits, but they often do not meet the "decent work" criteria of social protection, pay, and safe working environments. Consequently, the transition to the green economy involves formalising and improving current "invisible" green jobs while creating new jobs.

Legal and regulatory systems in developing countries are also being critically reviewed to include these definitions, acknowledging that a job is not green just because of the product. The process and labour conditions are also important considerations. This creates a conceptual shift from environmental aspects to social equity, guaranteeing the transition does not exacerbate labour-market equity losses.

2.2 Theoretical Connections between Environmental Sustainability and Employment

The theoretical connections between environmental protection and employment are often premised on the concept of "Green Growth." Essentially, the green growth paradigm proposes that environmental protection (and sustainability) and economic growth are not mutually exclusive; rather, they can be mutually reinforcing. In developing countries, the green growth paradigm relies primarily on the "leapfrogging" hypothesis, which argues that developing countries can immediately benefit from clean technologies in their development process without incurring the "legacy costs" of fossil-fuel-dependent infrastructure.

From a labour perspective, as mentioned above, a transition to a green economy is expected to have a "net positive" effect on jobs. A country may lose jobs in certain brown industries (e.g., coal mining, traditional heavy manufacturing); however, the green economy often requires a labour-intensive approach that retains or replaces these industries. For example, renewable energy projects (decentralised solar and wind) often require more workers per unit of energy produced than centralised fossil fuel plants; thus, creating jobs for communities with high unemployment and a youth bulge.

The theoretical connection also addresses the "resiliency" aspect of employment. Traditional jobs in many developing regions remain vulnerable to climate shocks. By shifting to "environmental-restorative" jobs (ex. reforestation, climate-smart agriculture), economies are creating jobs that are potentially more

stable with ecological fluctuations. This transition is frequently framed in the "Triple Bottom Line" (TBL) structure, in which simultaneous, convergent, and overlapping economic growth, social inclusion, and environmental protection are seen as a goal for enduring sustainability.

2.2.1. Defining Green Jobs: Combining Environmental and Community Dimensions

A universally accepted definition of 'green jobs' does not exist; different organisations propose varied frameworks (Stoevska & Hunter, 2012). Most, however, agree that green jobs combine environmental objectives with the principles of 'decent work,' including fair pay, safe working conditions, social protection, and workers' rights (ILO, 2021b; Renner et al., 2008). This paired emphasis broadens green jobs beyond sectors such as renewable energy to any occupation that fosters environmental protection while meeting decent work standards. Green jobs are thus intrinsically linked to wider social goals—poverty reduction, gender equality, and social inclusion—paralleling the three pillars of sustainable development (ILC, 2013).

2.2.3. Green Jobs and Sustainable Development: A Synergistic Framework

Green jobs advance multiple SDGs at once. They address SDG 1 (No Poverty) and SDG 8 (Decent Work and Economic Growth) through job creation, support SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action) via renewable energy and resilience projects, and contribute to SDG 12 (Conscientious Consumption and Production) and SDG 15 (Life on Land) (ILO, 2015). This interlinked impact makes green job investments an effective instrument for integrated development. For instance, boosting sustainable agriculture or water management can simultaneously restore ecosystems, create employment, enhance climate resilience, and increase local incomes.

Despite these advantages, the transition to green jobs is neither automatic nor uniformly positive. Job losses may occur in polluting, resource-intensive sectors, and some new green roles—particularly in informal recycling or agriculture—may fall short of decent work standards (Renner et al., 2008). This stresses the importance of a 'just transition' to ensure that the shift

to a green economy is equitable and welcoming for all workers and communities.

2.2.3. The Requirement of National Strategy: Insights from Ghana's Formulation Process

A coherent national strategy is essential for turning the concept of green jobs into effective, large-scale policy. Ghana serves as a strong example. Its Ministry of Employment and Labour Relations (MELR) developed the National Green Jobs Strategy (2023–2027) through broad, cross-sector consultations, creating an organized framework for green job creation (Ahmed, 2023, para. 2). The strategy addresses Ghana's significant climate vulnerability, as shown by a Climate Change Risk Index score of 68.33 in 2018, which threatens key sectors such as agriculture (EPA Ghana, 2019). Its goal is to generate high-quality green jobs that support environmental conservation (MELR, 2023, p. 4). Sensitisation is a core component that raises local awareness of green jobs, climate change, and green entrepreneurship (MELR, 2023, p. 5).

III. DONOR-FUNDED GREEN JOBS PROGRAMMES: A COMPARATIVE REVIEW

Due to limited domestic resources, developing countries rely heavily on international donors to fund green job initiatives (Pahle et al., 2016; Muller et al., 2020). A review of selected programs reveals different approaches and outcomes:

1. Zambia's Green Jobs Programme (GJP), funded by Finland (USD 12 million, 2013–2018), created 2,660 full-time green jobs and improved conditions for 2,018 MSMEs in construction through value chain development and green standards.
2. Egypt's Decent Jobs for Egypt's Young People (DJEP), supported by Canada (CAD 15 million, 2011–2016), created over 3,000 youth jobs in waste management, biogas, and sustainable agriculture, increasing national awareness.- Rwanda's Fund for Environment and Climate Change (FONERWA), backed by multiple donors (USD 188 million, 2013–2020), created 145,256 green jobs (60% for women); however, 99% were short-term (less than six months), highlighting sustainability challenges.
3. Kenya's Youth Employment for Sustainable Development (YESD), funded by Japan (USD 1.6 million, 2012), trained 750 youth in green construction, generating 67,150 person-days of employment.
4. Senegal's Partnership for Action on Green Economy (PAGE), a UN-led initiative, integrated green jobs into national policy (Plan Sénégal Émergent), conducted sectoral mapping, and won the 2019 Future Policy Vision Award for its integrated approach.
5. The Green Jobs in Asia (GJA) Project, funded by Australia, mainstreamed green jobs into labour policies and implemented sector-specific demonstrations (e.g., renewable energy) across five Asian countries.

3.1. Donor Support in West Africa: Ghana, Nigeria, and Sierra Leone

Donor-led interventions in West Africa are common but often face coordination and sustainability challenges.

1. In Ghana, several donors are active: the UNDP-GEF Ghana Green Jobs Project focuses on sustainable land management in the shea and bamboo sectors, while the World Bank and African Development Bank (AfDB) support afforestation and renewable energy projects with employment components. However, these efforts often remain fragmented, highlighting the need for Ghana's new National Green Jobs Strategy as a unifying framework (Musah, 2023, para. 1).
2. In Nigeria, significant projects include the World Bank's Nigeria Erosion and Watershed Management Project (NEWMAP, over \$500 million), which generates short-term restoration jobs, and the AfDB's Nigeria Electrification Project, which fosters off-grid solar employment. The main challenge is connecting these project-level results to a wider national green growth strategy, especially within a complex federal system.
3. Sierra Leone, as a post-conflict, highly vulnerable country, relies heavily on donors such as the World Bank, AfDB, and UNDP for climate-resilient livelihoods and renewable energy projects. Key limitations include the scale of available funding

and the institutional capacity needed to sustain and expand job creation.

IV. SYSTEMIC OBSTACLES AND CONSTRAINTS

The review underscores several persistent, cross-cutting challenges:

1. **Short-termism and informality:** Many green jobs are temporary, project-based, or informal, lacking long-term security, social protection, or career pathways (e.g., Rwanda's FONERWA). In Ghana, stakeholders have raised concerns about the sustainability of these projects and called for stronger government support for workers in transition (Workshop Proceedings, 2023).
2. **Fragmented and inadequate funding:** Donor funding is often cyclical, poorly coordinated, and insufficient to drive market transformation at scale. - **Evaluation deficits:** The lack of rigorous, independent impact evaluations hinders the development of evidence-based policy.
3. **The decent work gap:** Not all environmentally beneficial jobs are 'decent'. Roles in waste picking or agro-ecological activities can be insecure and poorly paid, creating a risk of 'greenwashing' employment statistics.
4. **Policy-implementation disconnect:** Even where sound policies exist (e.g., in Senegal), enforcement and budget alignment are often weak. Effective local sensitisation, as demonstrated in Ghana, is essential to closing this gap.

V. EVOLUTION OF GREEN GROWTH APPROACHES IN DEVELOPING COUNTRIES

The green growth approach has evolved in the Global South from reactive environmental policies to proactive economic frameworks. When considering more recent history, environmental issues were viewed as ancillary to industrialisation and poverty reduction. However, the global economic downturn and subsequent, more visible climate impacts led to a reframing of this position, with many countries adopting a "Green New Deal" perspective customised to their particular realities. In many developing

economies, green growth is currently being incorporated into national development strategies as an essential element of industrial development. This trend stems from the recognition that traditional carbon-intensive growth is becoming increasingly difficult in light of international climate commitments and the falling costs of green technology. For example, ASEAN nations have launched plans to promote green jobs because they understand that their future competitiveness will depend on their ability to shift to low-carbon production.

Nevertheless, the green growth agenda is not yet on a linear trajectory. Socioeconomic conditions and histories remain different from those of the Global North, leading strategists to localise their plans rather than borrow wholesale from the West. In this regard, strategy is increasingly focused on innovation and the development of domestic capacities, rather than relying on imported green solutions. Progress toward an "eco-friendly industrial policy," in which states intend to mobilise investments into sectors offering the greatest opportunities for jobs and environmental impact, among others, creates a stronger supportive context for the evolution of these plans.

VI. SYNERGIES BETWEEN CLIMATE ACTION AND EMPLOYMENT CREATION

6.1. Renewable Energy Development and Labour-Intensive Resources

At present, the renewable energy (RE) sector represents perhaps the most salient convergence between climate change mitigation and job creation. For developing economies, adopting the RE sector represents an increasingly viable transition to energy security from (oftentimes) volatile global commodity markets. More importantly, the infrastructure components required for RE installations, including solar farms, wind turbines, and decentralised microgrids, are generally more labour-intensive to develop and operate than their fossil-fuel counterparts. Investment in clean energy infrastructure across BRICS and comparable developing economies has been shown to accelerate sustainable development and generate diverse employment opportunities. These include high-skilled engineering positions as well as mid- and low-skilled roles such as technicians, solar panel installers, and maintenance personnel. Decentralised renewable energy systems can

significantly contribute to rural economic transformation in Africa and Asia by delivering stable, reliable power to off-grid communities. These systems create direct energy-sector jobs and facilitate the 'productive use' of energy, thereby generating secondary employment through local businesses and services.

Despite positive employment prospects, the RE sector faces challenges. There is a documented gender gap, with women underrepresented in both technical and leadership roles. Additionally, while building RE systems is labour-intensive, ongoing operations require fewer workers. To ensure RE remains a driver of employment, industrial policies should promote domestic manufacturing of RE components and capture more value for the national economy.

6.2. Circular Economy Initiatives and Informal Trade Sums

The circular economy approach, centred around reduce, reuse, and recycle, offers yet an additional important opportunity for job creation, notably in urban areas of the Global South. Instead of taking a linear "take-make-dispose" approach, the circular economy maximises the use of resources while minimising waste, creating economic value from what was formerly deemed waste. In many developing countries, this sector exists in the "informal" economy - millions of waste pickers and recyclers currently operate without formal commission or protection. Moving to a formalised circular economy offers the possibility of transforming these hazardous, marginalised jobs into decent green jobs. For example, research on e-waste processing in India demonstrated that it is feasible to integrate informal collectors into formal industry settings, thereby improving environmental outcomes and providing workers with tangible, decent incomes and secure working conditions.

These activities often require cooperatives or organisations to empower waste pickers, providing collective bargaining power and market access. In low-income contexts, circularity is often driven by necessity, resulting in high efficiency but informal systems. Therefore, policies should avoid replacing informal workers with capital-intensive automated systems. A co-production approach, involving municipalities and informal worker organisations, has shown that inclusive green jobs can support urban

sustainability and poverty reduction. Formalising these sectors is essential for a just transition, ensuring vulnerable workers are not left behind as the economy shifts to green energy.

6.3. Climate Resilient Agriculture and Rural Livelihood Security

Agriculture remains the backbone of infrastructure and livelihoods in many developing economies, employing most of the population. It is also the sector most vulnerable to climate change. This is important to note, as the relationship between climate action and employment in this instance stems from a climate-resilient agriculture (CRA) approach, characterised by improved land use, sustainable land management and conservation, and the cultivation of stress-tolerant crop varieties.

CRA practices are often more labour-intensive than conventional, chemical agriculture. For example, organic farming and regenerative practices require more manual labour for weed control, composting, and soil health management, which means greater rural employment opportunities. CRA techniques boost the "sustainability of livelihoods" by making farms more resilient to stresses such as droughts and floods, thereby alleviating the economic burden that drives rural-urban migration. In Eastern India, climate-resilient agricultural practices have improved farm income and food security for smallholders, effectively creating a "green" safety net for the rural poor .

Greening the agricultural value chain—from sustainable input production to green processing and packaging—can generate additional rural jobs. However, smallholders need access to green finance and technical information to adopt these practices. Donor-funded projects that focus on capacity building for farmers' organisations and climate information are especially important. Defining green jobs as sustainable livelihoods offers a holistic approach that addresses both environmental goals and the needs of rural communities, including food security and poverty reduction.

VII. KEY CHALLENGES TO GREEN JOB CREATION

The Global South's transition to a green economy is often seen as a leapfrogging opportunity, but it faces significant structural and systemic barriers. Although

there are strong theoretical links between environmental protection and employment, green growth strategies encounter practical challenges in labour markets, financial systems, and governance. These barriers are deeply rooted in the socio-economic realities of the Global South, where informal labour is widespread and institutional capacity is limited.

7.1. Inadequate Vocational Training as a driver of deficiencies in Basic Technical Skills

The first and clearest bottleneck to growing green employment is the pervasive "green skills gap," evidenced by the mismatch between the competencies sought by emerging sustainable industries and the skill sets available in the labour force. Research indicates that schools in many developing countries are poorly equipped to incorporate environmental protection into their training programs, resulting in a workforce with little institutional basis for its technical requirements in renewable energy, circular waste management, or climate-resilient construction. This skills gap appears to be a salient issue for Technical & Vocational Education and Training (TVET) systems, which have traditionally focused on legacy industrial sectors.

In many contexts (e.g., Ghana, Lebanon), weak skills anticipation systems prevent governments from recognising their future skills needs, leading to a lag between the adoption of technology and the labour market. The skills gap may take various forms, including skill shortages, which can be described in absolute terms, where there is no identifiable personnel; skill deficits, where workers exist but do not possess the necessary green skills; and skill obsolescence, whereby legacy industrial skills are no longer relevant in a transition towards a low-carbon economy. Pakistan's shift to sustainable energy is a useful example of how resource-rich countries can still face challenges in managing green human resources due to inadequate training institutions.

Skills development is further complicated by the prevalence of informal employment in many developing economies. The dominance of the informal sector makes it difficult to implement organised, standardised training for the green economy. Without targeted interventions for the informal workforce, green opportunities may reinforce existing inequalities, often benefiting a small urban elite while excluding the most disadvantaged workers from transitioning out of declining sectors.

7.2. Financial Restrictions: High Capital Costs for Green Startups

The second major challenge is the financial structure of developing countries, which often penalises green investments through high capital costs and a lack of specialised financial products. Green startups and SMEs are central to job creation in sectors like renewable energy and sustainable agriculture, but they typically face high interest rates and collateral requirements. Experts agree that financing is essential for the success of South Asia's green economy.

The "paradox of capital" in the Global South is that while green projects tend to have reduced long-term operating costs, their initial capital costs are significantly higher than those of fossil-fuel-based alternatives. Local commercial banks and lending institutions may not have the technical capability to assess the risk profiles of green business models, in part because local governments often require formal collateral that is not always considered risky. If a green enterprise lacks "bankability," it may scale, but with limited capacity to generate sustained employment. Additionally, global commodity markets are volatile and depend on uncertain international climate finance, creating an uncertain environment for green entrepreneurs. Without deep domestic capital markets, many green initiatives in the Global South depend on fickle donor cycles or foreign direct investment, which do not always align with local development priorities. As a result, the financial instability of green job initiatives is a major obstacle to creating jobs in the green sector, which often requires long-term labour planning and investment in human capital.

7.3. Policy Fragmentation & Weak Institutional Regulatory Structures

Institutional and regulatory barriers are the third major challenge. Green jobs depend on a complex web of policies across sectors such as energy, labour, environment, and finance. Many emerging economies experience policy fragmentation, with government agencies working in silos and sometimes pursuing conflicting mandates. For example, a ministry of energy may promote fossil-fuel subsidies to secure short-term energy supply, while the ministry of environment encourages renewable energy investments, creating confusion for investors and job seekers.

The legal dimensions of the green economy are still developing, with a premise of weak enforcement of environmental quality standards and weak institutional mechanisms to support a "just transition". In both Cambodia and the Lao PDR, it has been noted that the fragmented authority of ministries and agencies over natural resources is a major barrier to green economic development. The private sector is reluctant to invest in long-term green industrialisation amid an unclear, unpredictable regulatory environment.

State capacity for transition is often limited. Building institutional learning and compliance frameworks is costly for the public sector. Weak institutions can result in the benefits of green growth being captured by well-connected actors, leading to social exclusion and reduced trust in green policies. The challenge is not only to create green jobs but to ensure they are decent jobs, supported by strong labour and social protection systems.

VIII. THE ROLE OF DONOR-FUNDED INTERVENTIONS

International donors are essential actors in filling the gaps identified in the prior section, serving as interlocutors with many stakeholders and interests in green transitions. Donor-funded interventions provide technical assistance, financial de-risking, and monitoring to catalyse market transformation in the Global South. The success of these interventions relies on moving beyond isolated projects towards systemic change.

8.1. Technical Assistance and Institutional Capacity Building

One of the most valuable contributions of donors is technical assistance (TA) to host governments and local organisations to build institutional capacity. TA encompasses much more than training; it also involves redesigning organisational processes to deal with the complexities of a green transition. For example, donor initiatives have provided municipal governments in developing countries with the institutional knowledge necessary to embed green principles into infrastructure investments, and this learning should be grounded in those principles and repeated across other municipalities.

Providing technical support for TVET systems to meet the needs of green economy jobs is also paramount.

Programs such as the ILO's Green Jobs Programme provide capital-building frameworks for TA, enabling education to create a globally competitive workforce that can support a green recovery. By connecting technical education institutions with sustainable industries, donors can also help minimise possible job losses in traditional sectors, enabling less disruptive transitions for all workers. In Nepal alone, there are more than 30 donor-supported institutional mechanisms that focus on capacity development, awareness-raising, and providing TA to foster green growth overall. In addition, donor contributions typically give governments the fiscal and institutional "breathing space" to invest in nature-based climate actions. When donors strengthen technical assistance for employment-based social assistance services, they empower countries to scale up environmental renewal initiatives that meet the immediate income needs of the poor while building longer-term climate resilience. This type of capacity building is key to making sure that adaptation and mitigation activities are grounded in local state capacity.

8.2. Private Investment Activation and Blended Finance

Due to high capital costs and investor risk perceptions in the Global South, donors use blended finance to attract private investment. Blended finance combines development and philanthropic funds to mobilise private capital for sustainable development. Through concessional finance, guarantees, or first-loss capital, donors make green investments more attractive to private investors who might otherwise avoid them.

Case studies from Brazil and India demonstrate that blended finance can open new markets and build infrastructure that attracts private capital. These mechanisms are particularly effective at de-risking large-scale renewable energy or sustainable infrastructure projects, as public funds can leverage much greater private investment. The ultimate goal is to prove the commercial viability of green investments so that markets can function independently of donor support.

However, blended finance faces criticism. Some argue it has not attracted private capital at the necessary scale, or that funds often support projects that would have proceeded regardless. For blended finance to be effective, it must be supported by policies that

encourage green investments and ensure that mobilised capital leads to high-quality green jobs.

8.3. Employment Outcomes Monitoring and Evaluation on Green Projects

The last, but equally critical, donor role is on monitoring and learning (M&E) project outcomes. In terms of green jobs, M&E is critical to ensuring jobs categorised as "green" do not become a label for low-quality, low-security/minimum-wage type jobs. Donor programs promoted donor-driven definitions and M&E measurement standards for "job quality" and "green jobs," enabling the project to be accountable for the social and environmental impacts of its activities. Such as the youth empowerment projects in Rwanda, highlight the use of the same metrics to measure project progress and impact. In Kenya, the performance of donor-funded youth employment projects was systematically linked to institutional-level factors and the quality of M and E work plans. By requiring the donor to report a minimum on employment outcomes, local partners would become accountable for developing strategies to ensure the lasting sustainability of the jobs they create.

However, measuring ROI remains difficult in the Global South. Traditional M and E tools have not been able to measure the medium- to long-range impacts of capacity development or the "resilience dividend" of green jobs. There is a growing need for an expanded set of green economy indicators to support development monitoring across the economic, social, and environmental dimensions. If our donor-funded projects lack robust M&E, we risk appearing like "headcount" rather than tackling structural barriers to sustainable employment.

IX. DISCUSSION AND POLICY IMPLICATIONS

This study finds that while green job creation can promote sustainable development in the Global South, changes are needed in how international aid is delivered and how national governments operate. Aligning environmental justice and employment goals involves negotiating competing priorities and limited resources. Greater alignment between aid and national development priorities is essential.

The literature consistently highlights the need for better alignment between international donor agendas and national development priorities. Too often, green

initiatives are designed externally, lacking a deep understanding of local contexts. These top-down, foreign-driven projects may implement green technologies without sufficient groundwork, risking the loss of sustainability once foreign aid is withdrawn.

Donor-funded projects must be integrated with national green economy strategies to ensure long-term success. Development efforts should move beyond short-term projects and funding cycles toward long-term partnerships that promote policy coherence and institutional learning. In Ghana, for example, green economy initiatives succeeded when the government prioritised science and technology education. Aligning funding with national priorities allows green jobs to be scaled and creates opportunities for those with fewer resources. Coordination should extend beyond funding to include building global regulatory systems and addressing the digital and technical divide, ensuring developing nations can innovate rather than rely solely on imported green technologies. A just transition for marginalised labour groups must also be prioritised.

A just transition is central to green job strategies. As economies shift away from carbon-intensive industries, the risk of job loss increases. Policies must provide transitional assistance for displaced workers, including retraining, income support, relocation assistance, and efforts to diversify local economies where businesses have closed.

In the Global South, where informal employment is widespread, marginalised groups face even greater challenges. Formalising informal sector roles—such as those of waste pickers, smallholder farmers, and conservation workers—can create sustainable green municipal jobs. Focusing solely on green standards risks creating barriers if workers lack access to funding or support. Ensuring decent work is essential, not only for environmental benefits but also for protecting workers' rights. There is also a pressing need for greater gender and youth representation in green jobs. High youth unemployment in the Global South means green sectors offer unique opportunities for socio-economic empowerment. Donor-funded projects that support youth employability in the informal sector have shown that young people can be trained as green innovators and entrepreneurs.

Ultimately, the scalability and long-term viability of

donor-led initiatives are the true measures of their success.

Many green job initiatives remain in the pilot or proof-of-concept stage and have not achieved structural change. Scaling up requires shifting from project-based aid to market-based solutions that attract private capital and generate self-sustaining economic activity. Blended finance is important, but it should be used as a systemic market-building strategy, not just to subsidise individual projects. The ultimate goal of donor intervention is to exit the market once a self-sustaining system is in place. This requires strengthening local financial institutions to assess green risks and developing domestic capital markets for long-term financing. Sustainability also depends on lasting institutional changes. Building institutional memory is essential to maintain green practices after government transitions or the end of donor funding. Green principles should become core functions of state agencies, fostering a culture of continuous learning and adaptation. The ability of developing nations to grow and sustain a green workforce will be crucial for resilience and prosperity amid the global climate crisis.

Developing green jobs in emerging economies is both complex and essential, forming a core part of the global shift toward environmental sustainability. This analysis has explored the synergies between climate action and employment, highlighting the potential of sectors like renewable energy, the circular economy, and climate-adaptive agriculture as drivers of labour-intensive growth. Despite these opportunities, the transition faces significant structural challenges, including a large green skills gap, high capital costs for start-ups, and fragmented institutions.

Donor-funded interventions will continue to help overcome barriers by providing technical assistance to build institutional capacity and workforce skills for a green transition. Through financial mechanisms, they can catalyse private investment to scale green enterprises. Additionally, donors will promote robust monitoring and evaluation to ensure green jobs deliver both environmental benefits and decent work standards.

At the end of the day, the success of green job creation in the Global South will hinge on the capacity of national governments and international partners to align their efforts toward a just transition. This requires a commitment to social equity, formalising

informal labour, and building resilient green economic systems to withstand climate shocks. While the challenges are significant, the potential benefits—a more just, stable, and sustainable global economy—justify urgent action to promote green employment. The transition is not just a technical change in energy sources; it demands a fundamental rethinking of the relationship between labour, capital, and nature. The following actions are recommended.

1. Develop and implement integrated national green jobs strategies: Countries should formulate national plans with a distinct budget, i- Develop and implement integrated national green jobs strategies: Countries should create national plans with dedicated budgets, integrating them into National Development Plans and Nationally Determined Contributions (NDCs), as demonstrated in Ghana and Senegal. - Anchor interventions in decent work principles: Adopt ILO guidelines to ensure green jobs offer fair wages, safe working conditions, social dialogue, and protection, prioritising job quality over quantity are investment for green businesses. - Commit to robust monitoring, evaluation, and learning (MEL): Support independent, long-term impact evaluations to build a reliable evidence base for green job strategies.
2. Encourage inclusive implementation and local sensitisation: Ensure national strategies are communicated and adapted to local contexts. In Ghana, making climate change messages accessible and locally relevant has been key to stakeholder engagement and effectiveness (Workshop Proceedings, 2023, p. 8).

X. CONCLUSION

Green jobs offer an integrated solution to the interconnected challenges of environmental protection and socioeconomic exclusion in developing countries. Donor-funded programmes have been instrumental in piloting new approaches and generating early employment outcomes. The adoption of national strategies, such as Ghana's, represents significant progress toward policy coherence. However, achieving systemic change requires a comprehensive, long-term strategy led by national governments and supported by coordinated donor partnerships. This approach should be grounded in decent work

principles, embedded in national policy and financial systems, and implemented through inclusive, locally relevant engagement to fully realise the potential of green jobs for a strong and equitable future in West Africa and beyond.

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