GREEN JOBS & SUSTAINABILITY PAPER SERIES

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PART I

The impact of climate-smart investment and the creation of decent green jobs

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EXECUTIVE SUMMARY

The range of sustainable initiatives providing benefits to the environment, national economies, and individual livelihoods is vast, covering solar-powered cold storage for small-holder farmers' produce, the expansion of city-wide recycling programs, large-scale wind and hydro power infrastructure projects, and numerous other areas. Emphasizing and prioritizing employment as a part of such sustainable initiatives is at the core of the concept of "green jobs," and should also include a focus on marginalized communities and individuals at risk of losing livelihoods to climate change and the changes that will need to be made to mitigate its effects.

As the first in a three-part series on green jobs, this paper provides an overview of the concept of green jobs, including the importance of ensuring that green jobs are also decent jobs in terms of pay and working conditions. This is a critical distinction that should be a key area of consideration for governments at all levels seeking to promote sustainable economic development, as well as the private sector companies and civil society organizations partnering on the same.

Building on this, this paper will explore the importance and potential impact of climate-smart investment and the subsequent growth in green jobs. Given the drastic global reduction in greenhouse gas emissions needed to mitigate global heating and the massive economic shifts that the reduction in fossil fuel usage will likely entail, the rest of our examination of green jobs will require a deep understanding of both the benefits and the risks of moving towards a greener economy. Governments will need to balance the overall economy, employment levels, skill-building initiatives, and worker protection schemes with climate change mitigation and adaptation efforts, the foremost of which will likely be energy transitions.

Private sector companies will need to ensure they are able to comply with new, potentially stricter environmental policies, but could benefit substantially from government subsidies directed at sustainability, including green job creation. Individuals will have to contend with the possibility of a loss of formal or informal employment (to say nothing of the effects of climate change itself) but given the right skills training, capacity-building, and opportunities, could gain the opportunity for more secure, higher paying employment in better working conditions.

The next installment of this series will look at specific approaches to the creation of green jobs in India, Bangladesh, Nepal, and Sri Lanka and some of the key successes and lessons learned from these different contexts. The final installment will provide a deeper look at how government policies can influence the creation of green jobs and the opportunities presented in different sectors and industries.

Defining Green and Decent Jobs

Within the broader sustainability space, the concept of green jobs has been a focal point of increasing importance for governments, private sector companies, and civil society organizations in developing economies in particular. Defining green jobs has been a source of more debate over the previous decade, however, especially when it comes to statistical analysis on overall employment numbers or how many green jobs a particular government or initiative can create. Some authorities, for example, focus on the industries that jobs are a part of, categorizing as "green" those that "produce environmentally beneficial products" or help manage pollution, waste, or destruction of natural resources. This can complicate the definition of green jobs, however, when considering that this does not include jobs in the nuclear power sector, despite this being a more environmental alternative to fossil fuels, or jobs related to the production or maintenance of hybrid or electric vehicles in the automotive sector.

However, a more broadly encompassing definition that is becoming the common standard describes green jobs as those that "contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency.", There are two key facets within this wider scope of employment targeting environmental benefits and sustainability. The first views green jobs from an output perspective. These are jobs that "generate goods or provide services that benefit the environment," including "green buildings, clean transportation, or solar-powered water-heating systems." The second looks at production processes and includes jobs that "contribute to more environmentally friendly processes – for example by reducing water consumption, controlling air pollution or improving recycling services" even when the final output may not be entirely green in and of itself.

The International Labour Organization (ILO) includes one further facet in its definition of green jobs that has also sparked further debate: that, to be categorized as green, a job must also be decent, meeting several criteria around fair pay, security, social protections, and equality. Not all jobs contributing to the preservation or restoration of the environment are in fact decent jobs, however. For example, including this in the definition minimizes the important work that waste-pickers in particular do in reducing environmental degradation. These are green jobs even though they are informal and generally done under harsh conditions, with little to no security, and for minimal pay. While decent work is not currently a defining part of green jobs, it should be the standard emphasized by governments and organizations working on the creation of environmentally friendly employment. Including social and worker protection measures in the process of creating new green jobs is vital to ensuring marginalized people are not further affected in new ways by the climate crisis. And any government initiatives to subsidize and incentivize green jobs should consider informal or indecent work that already contributes to greater sustainability.

The Potential Impact of Climate-Smart Investment and Green Jobs Creation

In short, the creation of new green jobs has the potential to benefit millions of people, including many of the poorest members of society, and push national economies to new levels of growth provided the proper steps are taken for measured and inclusive shifts across sectors. Climate-smart investments and transitions towards renewable energy, investments in mass transit and smart cities, sustainable construction, manufacturing, and agriculture practices are some of the necessary ways that governments and societies can mitigate global heating and the effects of climate change.Investments in these areas also have the potential to create tens of millions of new jobs, vastly offsetting the number that will be lost in the process.

In 2018, the ILO estimated that 24 million new jobs could be created globally by 2030 if sustainability initiatives centered around renewable energy, electric vehicles, and increasing the energy efficiency of new and existing buildings are implemented and carried out in full. Energy transitions will cost jobs too, but the net increase could still be as high as 18 million new green jobs by the end of this decade.More recently, the International Renewable Energy Agency (IRENA) and the ILO laid out a framework for keeping global temperature rise below 1.5°C that would see the creation of 43 million jobs by 2050; the 2°C framework estimates the creation of 23 million jobs during that same timeframe. These are both significant increases from the 2020 total of 12 million renewable energy jobs worldwide. Furthermore, recent research by the Rockefeller Foundation estimated that investments towards distributed renewable energy systems and ending energy poverty in Africa and Asia could create 25 million direct green jobs by 2030 (19 million permanent and six million temporary); half of these jobs would be in South Asia, primarily in India. Even more striking is the estimate that this would be roughly 30 times more new jobs compared to the number created by a similar investment in the fossil fuel sector.

The International Finance Corporation has also examined the potential macro-level financial opportunity provided by moves towards sustainable, climate-smart development. By prioritizing green buildings, green transportation infrastructure, and electric vehicles – essentially fully meeting the NDC targets set at the Paris Agreement – South Asia could unlock $3.4 trillion in investments by 2030. Based on population and urbanization projections, 70% of buildings needed in India by 2030 have yet to be built; this represents a potential investment opportunity of $1.4 trillion towards green buildings in India alone. Likewise, projections by the World Economic Forum indicate a potential economic benefit for India of $1 trillion and 50 million new green jobs by 2030 if the government's new commitment to net-zero emissions by 2070 receives sufficient investment.

Lastly, a recent analysis by the World Resources Institute has shown that, globally, climate-smart investments create more jobs per $1 million spent when compared to non-sustainable investments across the same sector. For example, investing in solar energy creates 1.5 times more jobs per $1 million compared to investments in fossil fuels; hydro and wind power investments each create 1.2 times more jobs. While job creation in some sub-sectors still favors traditional, non-sustainable investments – carbon capture and storage investments, for example, only create 0.5 times as many jobs as fossil fuel investments – climate-smart investments are generally much better job creators. It is important to note that this analysis is based on near-term job creation related to recovery from economic crises (in this case, the COVID-19 pandemic), measures can be put in place by governments and private sector partners to help transition near-term jobs into longer-term ones that would provide greater job security and sustainable livelihoods.

Whereas many aspects of the fossil fuel industry are largely automated and many people depending on the sector for their livelihoods are doing so informally, many green jobs requires greater amount of human labour. The installation of solar panels, for example, thus creates additional opportunities for formal employment with comparatively lower levels of skills needed for entry relative to fossil fuel jobs that require engineering expertise

Wages may also be comparatively lower, but the job security and additional benefits stemming from formal employment in a growing sector may outweigh those costs. Other sectors like sustainable agriculture or nature-based solutions such as initiatives subsidizing minor forest produce in India can also provide greater opportunities for green job creation with less investment required into skill development and training. Similarly, investments in eco-tourism can improve livelihoods for local communities while benefitting and preserving the natural environments they depend upon. In Bangladesh's massive garment manufacturing sector, sustainability initiatives.

Again, however, government intervention and oversight will be a necessary and important aspect of ensuring that green job creation is also decent job creation. Public-private partnerships such as those that are often part of the renewable energy transition should be created with mandates for wages, worker protections, skill training, and development opportunities. Governments can also take strides to formalize labour standards, prioritize longer-term contracts, fair purchase pricing for agricultural goods and services. Lastly, governments should prioritize employments of marginalized groups, women, and individuals whose livelihoods – both formal and informal employment – will be most affected by climate change mitigation strategies that lead to green jobs. The renewable energy transition in particular will affect millions of people, especially in coal-dependent states, and could lead to sustained unemployment if they are not provided with the means to secure comparable income levels. Several steps towards comparable employment in green jobs can be made through additional skills training, education, welfare programs, or other initiatives such as apprenticeship programs. It will be impossible to avoid all economic disruptions and employment losses in certain sectors going forward, but governments can limit the damage through strong leadership and articulate, data-backed demands of private sector companies.

While many of the highly touted numbers above are estimates, often based on best-case scenarios, it is clear that green jobs can and should be the future of economic development. Climate change will arguably cause just as much economic damage as it will social and environmental damage. The World Bank has noted that climate change could pull an additional 62 million South Asians into poverty by 2030 because of extreme weather, pressures on electricity systems, water reserves, food supplies, and infrastructure, or economic and health crises like the pandemic. Green jobs would help limit that number not only through sustainable employment but by expanding efforts to mitigate those factors.

Although there will be job losses caused by energy transitions and there is a positive correlation between fossil fuel emissions and economic growth, the impact of the air pollution those emissions cause is also extremely costly. In 2016, excess premature death caused by air pollution led to economic losses of 7.4% of GDP across South Asia (an underestimate that excludes income loss due to lowered crop yields caused by excess air pollution or work days missed due to health issues); in 2019, health-related impact of air pollution cost India alone $36.8 billion, 1.36% of its total GDP. Once again, climate-smart investments leading to green job creation would alleviate those economic losses as well as the impacts on health and mortality.

A panacea for climate change does not exist, and it is unrealistic to expect any government to be able to implement mitigation efforts without causing some level of near-term economic disruption and loss of employment. But combining job-creating transitions towards sustainability with inclusive training and skill-building programs, worker's rights, and social protection initiatives may be the most holistic approach to ensuring an economically and environmentally sustainable future.