GREEN JOBS & SUSTAINABILITY PAPER SERIES

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PART 3

South Asia Case Studies

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EXECUTIVE SUMMARY

This is the final installment of Swaniti's series on green jobs in South Asia. Previously, we have sought to define green jobs, examine the potential and risks they bring to workers and economies at large, and understand how government policies can affect the creation of decent green jobs. This installment provides a bring overview of the current situations around green jobs in India, Bangladesh, Nepal, and Sri Lanka.

In India, one case study looking at new rules implemented for the collection and recycling of e-waste provides an example of how initiatives can promote environmental protection, jobs, and growth in a circular economy by regulating processes designed to curb a growing issue. At the same time, it also provides an example of the need for government rules and policies to ensure marginalized people and informal workers at risk of losing their livelihoods are explicitly included in these transitions.

Bangladesh has seen significant growth in green jobs over the past decade, particularly in adaptation activities and construction. As the government promotes a more sustainable economy, it is encouraging to note that trade unions and workers' rights groups are working alongside that to ensure that new green jobs being created also meet the standard of decent jobs.

Nepal is in a tricky situation considering its economic emphasis on tourism. While climate change melts glaciers and leads to receding snowlines in the Himalayas, a prime destination for international tourists, the sector's reliability is becoming more tenuous. Despite this, promoting and emphasizing eco-tourism can boost economic growth while creating green jobs as can the sustainable construction of new infrastructure to further increase tourism. However, that increase in tourism may lead to increased use of fossil fuels and congestion, mitigating the economic gains with potentially negative environmental impact.

Sri Lanka finds itself in a similar situation regarding tourism and the potential for eco-tourism, but recession and unrest may likely continue to make progress challenging in the near future. There may be the opportunity for the country to come out of its recession and political instability on the back of an ongoing transition towards a greener economy and the creation of green jobs, but only time will tell.

INDIA

In a speech given earlier this month at a World Environment Day event, Prime Minister Narendra Modi emphasized the importance of green jobs, stating that "the way India is taking decisions in the interest of the environment and implementing them rapidly is also generating a large number of green job opportunities." This followed his announcement in February that green growth and green jobs would be an important piece of the budget for FY 2023, continuing the work that the Government of India (GoI) has been doing to create green jobs over the past decade.

In 2015, the GoI launched a new initiative called the Skill Council for Green Jobs (SCGJ). Part of the National Skill Development Missions and aligned with the Ministry of New and Renewable Energy (MNRE) and the Confederation of Indian Industry, the SCGJ partners with manufacturers, service providers, green companies, and training institutions to implement nationwide programs. These focus on training workers with the skills needed for green employment, such as after-sale maintenance on solar or wind energy infrastructure, as well as entrepreneurial skills in rural areas in particular. In its first four years, more than 70,000 individuals had been trained, mainly on skills required in the renewable energy sector, through 350 training centers nationwide.

More recently, the SCGJ and MNRE have been prioritizing the creation of jobs and the training programs needed for workers to fill them in areas such as the installation and maintenance of solar streetlights, biogas facilities, and solar power plants.

To facilitate this, and in conjunction with Digital India's push to take many government and public services online, the SCGJ is creating an online employment portal specifically for green jobs in the renewable energy space, which the council believes will help sustainably-focused companies and well-trained workers find each other more efficiently. This will also allow for better data collection and analysis to allow for greater understanding of what works and what needs to be changed to create and fill more green jobs.

As noted in previous entries in this series, the potential for green jobs in India over the coming years is massive. Meeting 2030 goals for renewable energy could see the creation of nearly 3.4 million jobs by the end of the decade. Comparing that to the 111,400 individuals employed in the wind and solar energy sectors in 2021 demonstrates just how significant investments in these areas could be. With that said, most of these green jobs created in the sector thus far have been temporary, ending once the construction of the project is completed. Estimates from one solar company showed that it was employing around 3,000 direct employees and 2,000 indirect employees in 2019. By 2021, it was employing just 500 people both skilled and unskilled workers.

While this is only one example, it is indicative of one of the main challenges that will need to be addressed in order to actually realize the potential growth in green jobs the renewable energy sector could provide. Skills training and development are key, especially in rural areas and in areas of energy transition where coal mines will become less necessary or close entirely. Just as important, however, is ensuring that skills programs are consistently updated to retrain temporary workers or train workers to meet new demands from developing industries such as electric vehicle battery manufacturing or repair. Furthermore, ongoing and steady implementation of renewable energy projects can make for more consistent employment even when the individual projects are temporary. While India currently imports most parts for solar installations, private sector leaders like Reliance Industries' Mukesh Ambani are calling for increased self-sufficiency in the production of renewable energy materials; ramping up manufacturing for domestic use and export would also create more permanent employment.

Lastly, regional or state-specific programs tailored to the needs of companies and workers in the area should be prioritized. SCGJ CEO Praveen Saxena recently noted that currently, the council does not have the capacity to conduct independent research on specific regional needs. Instead, they are only able to "follow the ministry's footsteps," and gain an understanding of how to support employment needs in a specific region only after the ministry launches a program there. Increasing the capacity in this area could go a long way toward increasing the efficiency of the initiatives overall.

India's capacity for green jobs is not limited to the renewable energy sector, however. Numerous other areas have significant potential for greener, more decent jobs as well, including construction, transport, waste management and recycling, sustainable agriculture, and eco-tourism. While there is no space in this paper to cover all of these in detail, the issue of electronic waste (e-waste) management and recycling provides interesting insights into the green employment ecosystem as a whole.

The amount of e-waste produced by mobile phones, computers, televisions, and now electric vehicles has been rapidly growing around the world since the turn of the century. India, now the third-largest contributor of e-waste worldwide, saw its e-waste increase by 32% from 2019 to 2020. While the GoI has recognized this as an increasing issue for years – India is still the only country in South Asia with e-waste laws in place, having first established them in 2011 – only 10% of e-waste was collected for processing, recycling, or safe disposal in 2020; the rest ended in landfills or elsewhere. As such, the government has established a new set of e-waste rules that are expected to come into effect in August of this year. These will require consumer goods companies and electronics manufacturers to "ensure at least 60% of their electronic waste is collected and recycled by 2023 with targets to increase them to 70% and 80% in 2024 and 2025 respectively". The rules also allow e-waste-producing companies to enlist a registered third party to manage the collection and recycling process, and state governments are being tasked with setting up dismantling and recycling facilities, and providing skills development and training as well as health and safety protocols for workers.

Clearly, the potential for green jobs being created in the e-waste recycling supply chain is exciting and reflective of the potential provided by a green economy overall. However, until now more than 90% of e-waste collection and recycling was done by the informal sector, often by rural migrants with low literacy levels, women, and children. With the new rules requiring third-party processors to be registered businesses, there are a significant number of informal jobs at risk of disappearing across the supply chain. This has informal workers and organizations that represent their interests such as the Indian Federation of Reverse Logistics (IFRL) concerned about the loss of their livelihoods.

This is a useful example of the critical need for policies promoting green jobs, a sustainable economy, and environmental protection to be written in a way that explicitly includes those most at risk from these transitions. While the new e-waste rules specify skills training and workers' rights and safety, they should also specify priority hiring for those who have been working informally in this sector under hazardous conditions and for low wages. Only by doing so, bringing informal workers into the fold of decent, green jobs, can such initiatives truly be considered a success. This is true across all other sectors and countries as well.

Bangladesh

One of the most climate-vulnerable countries in the world, Bangladesh is facing cyclones, floods, and heatwaves of increasing frequency and intensity on top of the threat of further sea-level rise. Having already experienced 185 extreme weather events due to climate change between 2000 and 2019, the combination of its low elevation (with two-thirds of the country less than 15 feet above sea level) and high population density has experts predicting that by 2050 one in seven Bangladeshis will be displaced by climate change. This includes a potential 18 million people being forced to migrate due to sea level rise alone. One estimate states that half of the residents of urban slums in Bangladesh are climate refugees forced from their villages due to flooding.

There is no shortage of data that further highlights the extent to which the climate crisis has already deeply affected Bangladesh and its people, but one key fact that should not be lost among the other statistics is that Bangladesh is bearing this incredibly significant burden despite contributing just 0.56% of global emissions. (Other estimates said it is as low as 0.3%). Considering the country is facing a crisis caused almost entirely by others, it is impressive that Bangladesh was at the forefront of green job creation among developing economies by 2010.

A 2010 study found that there were nearly 3.5 million environment-related jobs in Bangladesh at the time, though only 800,000 of these met standards needed to qualify as jobs both green and decent. Most of these jobs were in climate adaptation activities and sustainable construction, but transport, manufacturing, waste management, and sustainable energy were growing quickly as well. By 2013, Bangladesh had a green workforce as large as some European countries, largely due to an increase in the use of solar power that saw the number of solar-related jobs double between 2011 and 2013.

More recently, the Prime Minister of Bangladesh has emphasized as part of the country's commitments under the Paris Agreement the development of policies and programs that will "provide support for skills, retraining, and redeployment" for workers affected by transitions to green power, transport, and industry. These updated commitments will also include "further research into possible new areas of green job creation...and responsible investment through mandatory sustainable practices and employer-worker dialogues about just transition." Trade unions and civil society organizations have also been fighting to have workers' rights included in the development of green economic plans and to ensure that the "decent work" aspect is not ignored. Additionally, a new multisectoral action plan for sustainable plastic management seeks to build "a circular economy [that] will help create new value chains, green skills, employment, and innovative products while addressing social and environmental challenges."

At a cost of €7.20 per tonne, two Spanish companies purchased 1,159 tonnes of carbon offsets, or almost 40% of the total amount of 2,897.5 tonnes CO2e, resulting in a profit of €7,900 (after bank fees). Adopting similar approaches and business models across India's varied agricultural sectors could see similar increases in revenues and reductions in emissions.

Nepal

Nepal has experienced record droughts and downpours as well as erratic monsoons, floods, and landslides in recent years. As a whole, "the Himalayan mountains are warming between 0.3-0.7o C faster than the global average, causing glaciers to shrink, snowlines to recede, and increasing the danger of floods when expanding glacial lakes burst." Melting glaciers will affect nearly all sectors of the economy, from agriculture to infrastructure to renewable hydropower, and the effects extend across borders to neighboring countries that depend on snowmelt to fill rivers. The critical tourism sector is also being hampered by climate change, deeply affecting the livelihoods of individual Nepalis and the national economy.

Facing these issues, the Government of Nepal has been advocating for climate solutions on the world stage for years, highlighting the impact of melting glaciers and other natural disasters on its people and its development. Government officials have aimed to "bring together more and more government representatives, climate change experts, and global institutions working in this area" to discuss, in part, the development of its green economy. Most recently the government and its development partners have put together a strategic action plan to work towards Green, Resilient, and Inclusive Development (GRID) which will see investments dedicated to "promoting green growth, jobs, and infrastructure.

The challenge with an economy with this kind of sectoral makeup is that many of the more straightforward opportunities for creating green jobs, particularly within the manufacturing sector, are not as readily available.

The agricultural sector that provides livelihoods for such a significant portion of Nepalis, though it has been and should continue moving towards greener practices, is less likely to be a source of new employment opportunities.

With that said, tourism, especially ecotourism, as well as infrastructure and renewable energy are prime opportunities for green economic development in Nepal. Creating a new sustainable infrastructure to support a growing ecotourism sector could create numerous green jobs. Further expansion of hydroelectric dams as well as wind and solar energy could help reduce the use of fossil fuels while providing new employment opportunities.

These areas are not without risks, however. Increased tourism and the development of new infrastructure to support it may increase the number of vehicles on the roads, doing as much environmental harm as it does economic good. And the construction of hydroelectric dams has in the past resulted in significant deforestation and negatively impacted communities downstream, to say nothing of the risk of glacial melt threatening the structural integrity of the dams themselves. If the key actors approach these areas with care and consideration – and with the development of critical employment skills for the most-affected people at the forefront – there is still a compelling path towards more green jobs in Nepal.

Sri Lanka

With nearly half of its people living in coastal areas threatened by sea-level rise and cyclones and an economy that is strongly driven by tourism and agriculture (both of which are further threatened by climate change), Sri Lanka faces the combined problems of both Bangladesh and Nepal. The reliance of coastal populations on fishing and other maritime activities in addition to agriculture means that their livelihoods are at risk from all sides. Furthermore, while Sri Lanka has been able to meet the rising electricity needs of an increasingly urban population and tourism-heavy economy through an energy mix that includes 41% hydroelectricity and 4% other renewables, the hydroelectric infrastructure was "designed for historical rainfall patterns and volumes.

Changing rainfall patterns are likely to affect supply, and projected increases in heavy precipitation may overburden and potentially cause damage to these systems and reduce generating capacity."

As a small island nation, Sri Lanka has recognized the threats of climate change for decades and the government has been developing adaptation and mitigation plans since the 1990s, though conflict and unrest prevented significant investment in these approaches until 2009. Despite the challenges of civil war, economic crisis, and Covid-19, the Asian Development Bank has found that Sri Lanka's current climate action measures are on track to meeting its commitments and the government has been working closely with development partners to create action plans and investment guidelines. Implementation has been slow, however, particularly in the northern region that was most affected by civil war and hit by severe cyclones more recently, and overall national economic instability has the government exploring more than $160 billion in oil and gas investments to settle its national debt.

By acknowledging the challenges Sri Lanka faces in terms of climate change and green economic development, it's possible to see where there are substantial opportunities and where work is already underway. The tourism sector has grown by 5% each year since 2009 and the government has put in place long-term plans to promote environmentally responsible tourism and sustainable alternatives that minimize the negative impacts often associated with the development of tourism industries. In the energy sector, where fossil fuel imports consume a substantial amount of Sri Lanka's import expenditures, the government is working with the UNDP on "sustainable biomass energy production and modern bioenergy technologies as a substitute for imported fossil fuels to reduce Sri Lanka's carbon footprint. The potential for new job creation and skill development in the solar, wind, and hydroelectric sectors remains strong as well, since moving away from fossil fuels would promote economic independence at the same time that it improves individual livelihoods and protects the environment.

After adopting the GRID approach also seen in Nepal, the government has recently supported the development and implementation of 59 community action plans for improving rural livelihoods of people living in or near forests and protecting, restoring, and managing those forests. In addition to these green economic approaches.

One additional challenge facing the creation of green jobs in Sri Lanka is the fact that "in large industrial corporations, sensitivity toward 'greening' is generally high because of a concern about rising costs." This is particularly important because "while the government may push forward with reforms and the inclusion green standards with a regulatory perspective, active interest of large corporations...can mobilize a countrywide movement to generate sustainable employment [and] trickle down to small, medium, and micro enterprises." As such, engaging private sector companies and getting them on board with the creation of green jobs may be especially key in Sri Lanka.

Of course, it must be noted – even as it may go without saying – that efforts at creating green jobs and promoting environmental and economic sustainability have been significantly hampered by economic recession and social and political unrest over recent months. Making strides towards solving these issues will naturally take priority, and whether a greener economy can be a part of that solution is yet to be seen.

CONCLUSION

Throughout this paper series, the incredible potential impact of decent green jobs across South Asia has been consistently highlighted. Transitions towards renewable energy, green infrastructure and construction, EVs and mass transit, and sustainable agriculture can provide millions of people better-paying jobs with safer working conditions and stronger rights.

However, this potential will not be met on its own simply by subsidizing the construction of solar panels or incentivizing electric vehicles and waiting for the free market to create and fill jobs that lead to economic growth. Recognizing and mitigating the risk that green economic transitions pose to the most vulnerable workers – those in brown jobs or relying on fossil fuel industries for informal employment – is just as important as championing the potential for growth.

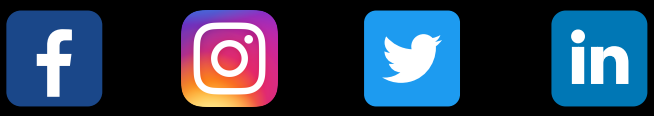
With that in mind, the key takeaways and points of emphasis for all stakeholders going forward should include the following:

- Recognition that green jobs are not by definition decent jobs, but that all efforts at creating the former should explicitly seek to ensure the criteria for the latter are met as well.
- Prioritization of rights and protections, including ongoing and regularly updated training and skills development, for:
  - Formally and informally employed workers
  - Women, youth, and other marginalized groups
  - Workers are most at risk of losing their livelihoods during green transitions.
- Understanding of the importance of steady government oversight that creates an empowering and enabling environment for businesses of all sizes and stages through macroeconomic and growth policies, industrial and sectoral policies, and enterprise policies shaped through thorough knowledge of national and local contexts.

Green economic transitions and the creation of green jobs is, unfortunately, not much of a choice for governments across South Asia at this point. Bearing some of the worst effects of climate change while being asked to deny themselves from fully realizing the economic benefits of fossil fuel-driven development is an inherently unfair position to be in.

South Asian leaders should continue to pressure their counterparts in Europe and the United States to reduce their own emissions levels or more aggressively and contribute more significant funding to areas in need. Doing so while also highlighting a track record of green job creation through inclusive, just transitions would be the best way to make that kind of pressure more palpable and effective. Green jobs are also one of the best ways to ensure the most significant number of people are gainfully employed over the next several decades, while also mitigating climate change. Green jobs are the future; livelihoods and a livable planet depend on them.

Swaniti is a decade-old organization working in the space of policy-making and public service delivery. Our projects have been focused on supporting the government administration in strategizing schemes implementation, providing research support to Hon'ble Members of Parliament, and developing data-technology tools. With flagship initiatives like Supporting Parliamentarians in Analysis and Research in Constituencies (SPARC) and Leadership and Engagement Associate in District (LEAD), Swaniti has supported Constituency Development and District Development Planning in various parts of the country.



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