

Impact of COVID-19 on India's Decentralized Renewable Energy sector

The nation-wide lockdown to restrain the spread of the COVID 19 pandemic has slowed down all the businesses in India, DRE sector being no exception to this. Decentralized Renewable Energy is recognized as renewable energy including solar, hydro, wind distributed both through the grid and through mini grid and off grid installations. DRE enterprises have been ensuring 24x7 reliable and clean energy solutions for the under-served segments of the Indian population through the DRE mini-grids and micro-grids. DRE sector has proved to be a milestone in uplifting the poor and marginalized communities in the society through their economic and social growth. Additionally, such enterprises have been catering to the need of the rural population that is devoid of the grid power due to geographic location constraints.

It is evident the critical success factors like community participation and funding play a major role in the sustainability of DRE projects¹. To catalyze DRE electrification projects both direct and enabling capital has been made available. Capital in the form of Technical Assistance (TA), Subsidies, Subsidized loans, Equipment finance, Equity investments for the deployment of DRE has been provided by public and private sectors including Government, DFIs, Corporates from CSR funds, Commercial banks, etc. But the unprecedented slow down due to the outbreak of the corona virus disease has a disrupting effect on the DRE enterprises as the sector is facing a liquidity crunch. Majority of the businesses will not be able to sustain themselves beyond 2-4 months given the current challenge continues at an uninterrupted pace. A very small section has a long term sustenance business plan to keep the business running in the aforesaid situation.

Major Challenges faced by DRE enterprises

Normally, DRE enterprises have high capital investment and low operating cost, which makes the project viable for small-scale enterprise. However, the present lockdown situation disrupts the continuity of the enterprise and hence lack of working capital and reduction in income has become the topmost challenges, which are being faced by the DRE enterprises. Coupled with these there are other challenges including delay in supply to the end consumers due to hurdles in supply chains (shortage of stocks, low production), lack of widespread risk analysis, capital and investment erosion and negative impact on returns of the involved enterprises.

Businesses have been adversely impacted as the enterprises are unable to deliver their sales and services to the existing customers and the potential investors in the interaction phase, the

¹ Vallecha, H., & Bhola, P. (2019). Scope, Relevance and Sustainability of Decentralized Renewable Energy Systems in Developing Economies: Imperatives from Indian Case Studies. *International Journal of Environmental and Ecological Engineering*, 13(6), 447-453.

delay could run into several months. There has been a marked decrease in demand from the end consumers.

On the human resource front, the key ponderable is that the nature of their work does not permit work from the home. Enterprises are concerned about the safety of their employees since the work is majorly on site. Payment defaults by the consumers, disruption in HR plans including hiring and training activities has resulted in the stoppage of work for various enterprises.

Road ahead for DRE enterprises

The enterprises expect for a financial inflow from the donors and various funds like CSR funds to save their business from falling apart. The government's flexibility in the extension of the tax compliance, reduction of GST will prove beneficial for the small and medium enterprises as they lack working capital during this situation. The situation has also highlighted the need to have local manufacturing facilities to strengthen the supply chain to prevent shortages and low production. There is an urgency to look out for support from the stakeholders to strengthen the network of the DRE sector and assist in the recovery mission. It is critical to understand the importance of scenario planning and long term sustenance plans for these enterprises since the growth of the DRE sector is interlinked to the path of achieving the ambitious carbon reduction goals and to the achievement of sustainable development goals.