



Enabling just transition through 'Roadmap for ecological and sustainable energy transformation (RESET)' project in Jharkhand

Government: Jharkhand, India

Region: South Asia **Sector(s):** Energy efficiency and Renewable energy

Summary

Jharkhand, a state situated in eastern India has the virtuous endowment of natural and renewable resources like solar and biomass. The state is highly dependent on coal reserves for its economy and energy requirements. Despite this, the state has not been able to achieve universal energy access, impeding further developments, especially in remote areas. To meet the energy demand of industrial and domestic consumers, the state requires a robust yet defined energy pathway utilising its renewable energy sources. Decentralized renewable energy applications remain an alternative to the conventional sources of energy, which can not only suffice the current energy needs of the population but also ensure a greener ecosystem.

Jharkhand is among the most vulnerable states of India in terms of the effects of climate change, where the prevalence of poverty accentuates the crisis. It is thus crucial to adapt to the present as well as the future impacts of pollution, increased carbon emissions and climate change to build the resilience of the vulnerable communities. To tackle these challenges, since August 2020, **Swaniti Initiative, a nonpartisan social enterprise that provides development solutions to improve the delivery of public services** is working in Jharkhand to fulfill the vision of just transition by working with government departments both at the state and district administration level to facilitate an institutional shift towards a green economy by promoting renewable energy, sustainability in agriculture and livelihood transformation from the conventional mining sector towards green jobs. The team further adopted a decentralised approach by enabling and capacitating different stakeholders, community members and government officials toward just transition. Today, the team has been able to mobilise **INR 45 Crores (USD 60,40,755.00)** to implement specific interventions linked to renewable energy and sustainability across six districts of Jharkhand.

2.5%

*Percentage share of
Renewable energy
sources of the total
power supply
As on March 2021*

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Results

Swaniti Initiative has a dedicated team which has been meaningfully engaged with the district administrations of **Bokaro, Chatra, Dhanbad, Pakur, Palamu** and **West Singhbhum** districts. As a result, in the past year the team has been able to strengthen governance by fast tracking the implementation of the existing schemes and mobilising funds through various channels for the same.

800+ kWp

Solar based installation generating more than 800 kWp has been completed in Chatra district

- The notable interventions include, rooftop solar installation on public assets which have been ongoing across two districts with a combined projected generation of more than **10 MWp** especially across health centres.
- Two **100 acre** lands have been identified to set up a **20 MWp** solar farm in one of the districts.
- An initiative to install more than **1500 solar street** lights under the **RURBAN** mission across two districts is underway.

Additionally, some of the team's efforts toward sustainable interventions include,

- In Pakur district,
 - The **Chas Haat project** has been launched for better market linkages where more than **7500 farmers** have been identified as beneficiaries.
 - Under the plastic waste management initiative, development of an **eco-park** is ongoing.
- In Ranchi district, Swaniti's team in coordination with the district agriculture office identified crop wastage as a major challenge in the agriculture domain which further debilitated the socio-economic status of farmers. In order to increase the crops' shelf life, procurement of **two solar cold storages** and **100 solar dryers** from private manufacturers is ongoing.

Two of our major achievements for the last mile connectivity include,

- The distribution of solar water pumps under the **Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)**. Swaniti Initiative could facilitate the complete installation of the set target of **300 solar water pumps** along with the district agriculture office in Chatra and are catalysing the process of implementation in the other districts. This initiative has enabled the beneficiaries in de-dieselising the agriculture sector and accepting alternative yet sustainable forms of agriculture.
- In the wake of the COVID pandemic, an effort to increase the coverage of child immunisation in the district was initiated by the Deputy Commissioner and the district administration of West Singhbhum. As a result, provision of **342 e-scooters** to all the Auxiliary nurse midwives (ANMs) in the district are underway of which 15 are distributed. The remaining ANMs are to be provided with e-scooters in a phase wise manner. This initiative was aimed at the smooth mobility of the ANMs in reaching the remote villages. Swaniti Initiative facilitated this initiative by aligning with major industries and enterprises active in the district.

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Initially, the farmers were not aware of the benefits of the PM-KUSUM scheme. The district agriculture office along with Swaniti Initiative made the farmers aware through virtual training and subsequently 300 farmers were identified as beneficiaries. The solar pump sets were then installed within a time span of two months.

Today, the farmers have saved electricity and above all are extremely happy. As a result, there has been an increase in the demand for the solar pump sets by many other farmers who have witnessed this change.

Ashok Samrat,
District Agriculture Officer,
Chatra

Next steps

- **To promote an integrated model of Distributed Renewable Energy applications** - Efforts to pilot and scale up existing interventions across public and private infrastructure, with combined DRE applications would be initiated for optimal usage of renewable energy. Swaniti Initiative intends to leverage the learnings and concurrent best practices derived from the grassroots across other mining affected districts in Jharkhand.
- **To expand the current domains of intervention and introduce clean and green processes to ensure just transition** - Efforts to catalyse inter-departmental scheme convergence for a holistic sustainable development would be made. For the same, Swaniti's team intends to expand their domains of intervention across agriculture, small scale industries, livelihood among others. Despite public provisions, evident lacunae still exist in the implementation and subsequent monitoring. To address the same, convergence of different vectors for a one-point implementation may ensure a greater impact.
- **To explore various financial models** - The current interventions are promoted and financed using subsidies. It was noted that the subsidy model may not prove to be viable and sustainable in the long run. Subsistent efforts will be made to pave the way in creating different financial models including private and public funding channels and gradually tapping into the consumers' share. This is aimed with the intent of enhancing the sense of beneficiary's ownership and lessening the government's financial requirement for subsidies.

Enabling conditions

- **Support from the district administration and [Jharkhand Renewable Energy Development Agency officials](#)**- To promote distributed renewable energy applications, the district officials have helped Swaniti's team to facilitate in implementing the existing schemes and curate innovative ideas by keeping sustainability at its core.
- **Fund mobilisation from various sources** - Swaniti's team has been successful in mobilizing government and CSR funds towards ecological and environmental sustainability in the state of Jharkhand from various sources viz., the District Mineral Foundation Trust, Special Central Assistance to Aspirational Districts, funds issued by the Ministry of New and Renewable Energy, Government of India to the Jharkhand Renewable Energy Development Agency, funds available with the Department of Horticulture, Government of Jharkhand and through corporate social responsibility.

Challenges and key lessons learned

- **Awareness**- It was learnt that training and capacitating the officials who could further enable more beneficiaries to adopt such sustainable interventions is vital. Additionally, capacity building of beneficiaries is necessary to enable them with the technical know-how and to empower them to make decisions which eventually promote just transition.
- **Approach**- Adopting a decentralised approach for a context like Jharkhand is vital to design and promote sustainable interventions involving renewable energy applications in the domain of agriculture, livelihood and small-scale industries. A shift from a previously followed top-

down approach to a bottom-up approach enabled the team to penetrate and pilot projects at the district level which fast tracked the implementation process.

- **Understanding the geography-** To introduce newer initiatives, it was learnt that an understanding of the geography was imperative to cater to the needs of the beneficiaries and accordingly curate the interventions, thereby enhancing the traditional knowledge through a global outlook.
- **Accessibility-** There was a lack of available data and prior documentation regarding surveys undertaken by the government departments. Further, for any intervention to be initiated, it was learnt that clarity is needed on associated stakeholders and departments. Swaniti, therefore, conducted stakeholder consultations and pre-assessments before designing decentralised interventions for the state and districts.
- **Adaptability-** In order to scale-up the initiatives, beneficiaries as well as the district administration needed to accept the shift in their daily ongoing practices and adapt to green and clean initiatives, which included a shift in their behaviour and habits as well.

More information

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