Community based security of Wind Turbine Generators – An inclusive development model

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A Suzlon Case Study

Suzlon Wind Turbines are located in remote areas across different terrains and states, making them vulnerable to security breaches, which lead to significant losses in customer revenue and power generation. To ensure the sustainability of its CSR initiatives beyond project life, Suzlon has been building Village Development Committees (VDCs) and nurturing them over the years to become true representatives of the village with a deep interest and sense of service in village development.

The Challenge: In 2013 and 2014, the wind farms in Jaisalmer, Rajasthan, faced a unique challenge of theft of expensive parts of the wind turbines, particularly copper cables. Nearly INR 1.5 billion worth of material across wind farms in that area was stolen, resulting in the shutdown of nearly all wind turbines and the loss of generation and revenue thereby negatively impacting potential investment opportunities for wind energy in the state.

To address this issue, a cross-functional think-tank at Suzlon devised multiple solutions, including increasing site security with local police and border security forces while installing CCTV cameras. However, the issue required a more inclusive and sustainable approach. An initiative of replacing copper cables with aluminium was undertaken but partnering with local communities was crucial for an immediate and permanent solution.

The Solution: This led to the creation of 'Project SUraksha', a community-based security solution implemented for 137 wind turbines across four villages in Rajasthan. A robust process was established, including selecting the village, conducting a partnership feasibility study, defining the scope of work and commercials, documentation and licensing as per the PSARA (Private Security Agency Regulation Act), and training and working with the Suzlon security teams. The impact was immediate, and the Suzlon-VDC partnership flourished since the maturity of the VDC was used as a fundamental criterion for village selection.

The Outcome: Suzlon effectively utilized the native intelligence and terrain knowledge of local villagers to combat the issue. There was a heightened sense of ownership once the villagers took charge, leading to a significant impact. VDC-based security resulted in a drastic reduction in number of thefts, early recovery of stolen materials, and less material being stolen due to early detection and response. When compared to before the implementation of VDC-based security, theft activity in VDC villages decreased by 76%.

Sustainable Impact: The agreement between the VDC and the villagers included a clause stating that a pre-decided fixed amount from their earnings per turbine would go towards village CSR activities. Activities included providing furniture, water connections to schools, and livelihood support to widows. In Rajasthan, where water is scarce, undertaking pond deepening projects to increase water storage capacity was a priority. This initiative encouraged village women and children to contribute to the "intelligence network" by proactively reporting suspicious movements to VDCs. The VDCs in Rajasthan have invested INR 2 million in social village projects to date while significantly bringing down the incidents of theft and resultant losses.

This program aligns with SDG 8 and SDG 9, strengthening Suzlon's commitment to ESG principles. The model is being studied by various agencies as a replicable case study.