

Carrying out a Study on Mini Grid in India - IGEN Access

The Indo-German Energy Programme – Access to Energy in Rural Areas (IGEN-Access) is a bilateral cooperation project carried out by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Indian Ministry of New and Renewable Energy (MNRE). IGEN-Access's objective was to improve the environment for rural energy enterprises and strengthen their ability to deliver renewable energy solutions to rural communities.

Sambodhi conducted this large-scale research on the Mini-Grid Sector in India in collaboration with The Energy and Resources Institute (TERI) and cKinetics. This study explored mini-grids' current scenario and efficiency; and identified the effect of various intrinsic and extrinsic factors on their performance. This project's scope of work included the following:

- reviewing existing literature and analyzing gaps,
- mapping mini-grids across India,
- quantitative and qualitative research,
- development of success criteria for mini-grids, and
- discussing the description of individual or combined German support for mini-grids.

Sambodhi's research allowed the perusal of existing data. The systematic, objective, and standardized measurement of real and empirical facts was achieved through quantitative research. Qualitative research techniques were used to obtain subjective data, which allowed us to interpret the captured data and discover additional phenomena. This exploratory research design used data, investigator, and methodology triangulation techniques. A sample of 300 mini-grids spread across Indian states was assessed and studied. Plant operator interviews (300), in-depth interviews (IDI) with mini-grid officials, and focus group discussions (40) with beneficiaries were also carried out as part of this assessment.