CUTS Project Brief

Exploring the Potential of E-mobility as a Booster for Local Economy and Livelihoods in India

Background & Rationale

One of the major roadblocks for the E-mobility transition in India is the high upfront cost of the vehicles resulting from high import dependency and limited local manufacturing of their components. However, the COVID-19 pandemic has acted as a boon for this situation. The Indian government has issued a clarion call for localisation of manufacturing and self-reliance or 'Atmanirbharta across the economy' to rebuild the economy.

A focus on the auto sector, especially electric vehicles, for India's post-COVID economic recovery may boost localised manufacturing and livelihoods associated with it. According to studies, localisation of pre-manufacturing and component manufacturing processes showcases the promising potential for creating business and livelihood opportunities. It can create new job roles and provide indigenised employment opportunities across the entire EV ecosystem.

However, in the current scenario, the sector's employment generation potential is in its nascent stage. It is limited to ambitious targets set by State EV policies. With India being highly dependent on imports, especially from China for EV components, a large chunk of manufacturing jobs is currently outsourced. Vehicle assembly is the main activity conducted domestically.

Additionally, though EV start-ups seem to be on the rise in India, the current requirements are limited and tilted towards highly skilled or niche roles. In contrast, an ecosystem approach is needed for the creation of jobs across the skill spectrum. Thus, the concerns for a just transition seem imperative in the context of the impact of the changing skill requirement on the existing workforce and new entrants, as well as gender disparities across the job and skill spectrum in the auto manufacturing sector.

Objectives

This project aims to explore the qualitative attributes and employment potential of the localised jobs, which will be created due to the indigenisation of the EV manufacturing ecosystem. The overarching aim is to deconstruct the EV manufacturing ecosystem in terms of job roles, skill requirements and employment potential. This will help create an employment roadmap for an indigenised and transition to E-mobility to cater to industry players and policymakers.

Methodology

An evidence-based mixed-method approach will be adopted for the study. For a comprehensive and comparative picture, an ecosystem approach will be adopted and automobile component manufacturing clusters will be taken as data collection points. This will be done to explore the potential of indigenisation as a tool for job creation in the EV manufacturing hubs of India.

For this purpose, two clusters from across the country will be selected for the study, i.e., the National Capital Region (NCR) and Bengaluru-Coimbatore (Karnataka, Tamil Nadu). While the first one is a significant automobile component manufacturing cluster, the Bengaluru-Coimbatore cluster is emerging as a hub for EV manufacturing.

- **Literature Review**
  A preliminary review of relevant literature including national and international reports on e-mobility and the jobs ecosystem, processes and employment in EV manufacturing ecosystem, existing central and state specific (for cluster locations) policies and schemes promoting localised EV manufacturing and employment generation, skill mapping and skill composition in EV manufacturing will be conducted. Further, consultations with international stakeholders will be held to understand the job and skill composition in EV manufacturing hubs in other countries.

- **Scoping Visits**
  Scoping visits will be undertaken to map prevailing and potential component manufacturing processes and job roles to the two selected clusters.

- **Primary Data Collection**
  – Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) will be conducted with identified stakeholders for data collection from EV and component manufacturing industries across the two selected clusters. The key objective will be to explore the potential job roles (and quantum of jobs) that will emerge due to indigenisation and assess existing gaps in job roles, skills and other attributes of a just transition.
  – One-to-one stakeholder consultations will be conducted with key stakeholders from relevant government departments and allied stakeholders such as Skill Development Centres.

- **Data Analysis**
  Using an ecosystem approach, quantitative analysis of job roles and skills using gap analysis, case study and narrative building methods will be undertaken. Simultaneously, quantitative analysis of job creation's quantum and nuances will be undertaken using appropriate statistical methods.

- **Drafting of the Report**
  Insights from the quantitative and qualitative data analysis will be consolidated and based on project report, will be drafted, which will include a roadmap for indigenisation of EV manufacturing jobs.

Envisaged Outputs

- **Primary**
  A research paper on the potential of e-mobility as a booster for local economy and livelihood creation, with a focus on the two selected clusters.

- **Secondary**
  In the process of preparing the final research paper, the following outputs will also be prepared.
  – A policy brief based on key insights from the research for informing the national and state-level initiatives aiming to boost localised manufacturing and employment generation through the promotion of EVs
  – Select op-eds and articles on key themes and findings of the research

Expected Outcomes

Embracing the decarbonisation process of the transport sector in India and leveraging it for the creation of relevant and inclusive livelihood opportunities will be the key to a socio-economically just transition. This research and its outputs will inform policymakers and other key stakeholders about this transition's potential and provide them with a roadmap to achieve that.

Duration and Support

The project is supported by Friedrich-Ebert-Stiftung (FES) and lasts six months, from February-August 2021.