

KEY  
ACHIEVEMENTS

Strengthened the state utility to help it more than double electricity transmission capacity in Maharashtra

Built up the institution's ability to manage turnkey projects and work with private sector partners

Technical assistance program led to creation of a new HR department, job descriptions, and competency framework at the utility



## this issue

Human resources capacity-  
building to increase  
power supply

## India State of Maharashtra Builds Capacity to Double Electricity Transmission

The Indian state of Maharashtra has more than doubled its electricity transmission capacity over the past decade, and currently meets a daily state demand of over 15,700 MW with a system availability of 99 percent.

But the residents of India's second most populous state have not always enjoyed such a reliable supply of power.

In 2007-08, the state-owned Maharashtra State Electricity Transmission Company Limited (MSETCL) was unable to meet demand—due to a shortage of generation capacity and an insufficient number of transmission lines with which to transmit electricity to load centers across the state—resulting in peak shortages of 26 percent.

This chronic supply-demand deficit led to massive load restrictions in rural and urban areas, and power outages that averaged 8 to 10 hours per day. And, as well as causing widespread public discontent, the power crisis had the potential to severely affect growth and productivity in a state that accounted for 13 percent of India's GDP.

In 2006, the Maharashtra State Government

came up with a strategy to boost MSETCL's transmission output through a US\$ 4 billion investment program to be implemented over a five-year period.

It was in this context that the government requested World Bank support.

What followed was a three-pronged World Bank strategy that helped MSETCL develop a business plan, design and implement a US\$ 1.5 billion expansion of its infrastructure, and introduce a series of human resource and business management reforms.

By 2011, these initiatives had helped MSETCL double its transmission output and close Maharashtra's once chronic supply-demand gap.

ESMAP played a key role in this successful outcome through a technical assistance program to strengthen MSETCL's capacity to manage public-private contracts and implement a range of new human resource policies that have helped turn a traditional state-run company into a commercial business entity. The ESMAP technical assistance program also served as springboard for

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a US\$ 50 million International Finance Corporation (IFC) loan, disbursed in early 2012, which paved the way for MSETCL to qualify for and access commercial financing for the first time.

MSETCL was created in 2005 as a result of the “unbundling” process that followed India’s landmark Electricity Act of 2003. The Act sought to extend access, improve service delivery, and boost power generation by introducing competition, enhancing accountability, establishing independent regulators at the state level, and unbundling into separate sectors the integrated State Electricity Boards that had traditionally been responsible for power generation, distribution, and transmission.

Kavita Saraswat, a Senior Power Engineer with the World Bank, said that despite the Electricity Act’s corporatization of MSETCL, the company lacked the essential systems and skills with which to manage the huge upsurge in investments required to double its transmission capacity.

“Like other state utilities in India, MSETCL had been carved out of a state department, and its employees had a very different way of working,” Ms. Saraswat said. “The collective mindset was not consistent with that of a commercial entity required to make a profit,” she said.

The first phase of the World Bank’s engagement—in 2006 under a World Bank Public-Private Infrastructure Advisory Facility (PPIAF)-funded business planning exercise—helped take stock of MSETCL’s strengths and weaknesses, as well as the opportunities and threats inherent in an unprecedented expansion program. Through this process, MSETCL also developed a Business Plan and a new organizational structure with which to implement the expansion program.

In 2007, the second phase of World Bank support—also through a PPIAF grant—helped MSETCL design a framework for the US\$ 1.5 billion Strategic Alliance portion of its US\$ 4 billion investment program.

Under the Strategic Alliance, MSETCL selected private sector vendors to serve as partners in building out the state’s transmission infrastructure through an open, competitive bidding process. Projects were bundled together to lower costs and ensure fast-track project implementation by avoiding multiple tenders. Each winning bidder would be responsible for the design and implementation of its projects, and incentives were put in place to encourage early completion.

The first two phases of the World Bank assistance involved introducing major changes to MSETCL’s business processes and organizational structures.

## IMAGES

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The third and final phase—supported by ESMAP in 2009—helped MSETCL develop its capacity to manage “turnkey” projects and transform its human resource policies. With some 40,000 employees spread across one of India’s largest states, the scale of the challenge was immense.

The institutional changes brought about by the year-long ESMAP program included:

- The creation of a separate Human Resources Department: MSETCL’s human resource functions had originally been carried out by an administrative department. The ESMAP program helped create a stand-alone human resource department that now promotes a range of innovative new policies.
- The development of a competency model for every job description: This formed the basis for a new Training and Development Framework that led to development of a Training Policy Manual, identification of training needs, and preparation of a Training Calendar.
- The creation of a Succession and Planning Framework: This was developed based on the new Competency Model and enabled—for the first time—the cross-functional movement of employees within MSETCL.
- The development of job descriptions: MSETCL originally lacked readily available job descriptions for various vacancies. These were developed through one-on-one meetings with people across the organization and now help the company fit personnel into appropriate roles and hold staff accountable for carrying out clearly defined responsibilities.
- The revision of the Performance Management System: MSETCL’s existing Performance Management System relied on a system of Annual Confidential Reports which tended to lack transparency and objectivity. A new Performance Based Appraisal System was designed and implemented that measured an employee’s performance based on assessment of performance in Key Result Areas and Key Performance Indicators (KPIs). MSETCL is adopting this new system in phases. Presently, the KPIs have been institutionalized at the depart-

ment level and for senior management at the individual level.

- The creation of a Career and Succession Planning Matrix that helps identify the competency requirements for critical jobs and assess candidate competency.
- The design of a Rewards and Incentives System: MSETCL originally did not have a structured rewards and incentives system in place. The program helped develop a two-tiered rewards structure to be overseen by a Zonal Award Committee in each zone and a Corporate Office Award Committee.

An extensive consultation process followed at every stage and across all levels of the organization. This resulted in the sense of ownership being transferred to MSETCL and contributed significantly to the smooth implementation of organizational restructuring. Holding workshops to gather employee feedback, followed by dissemination workshops of the planned changes by the senior management, responding to employee queries at each stage, helped in strengthening the change process.

After a year of implementation and continued management support to transformation initiatives, change had permeated all levels of the MSETCL organization.

In 2009, in line with the Strategic Alliance framework, MSETCL awarded seven bundled packages to six different companies. The bidding attracted a group of globally respected transmission vendors who have to date completed more than 70 percent of the transmission expansion project. Project implementation costs have been lower than MSETCL’s internal estimates, resulting in cost savings of more than US\$ 100 million.

Kavita Saraswat said the successful implementation of projects under the Strategic Alliance model attests to the fundamental changes that have taken place within MSETCL. As a result of the ESMAP program, she says multi-skilled teams are now placed in the field to manage contracts, which results in improved efficiency and coordination, as well as faster decision



## ESMAP MISSION

The Energy Sector Management Assistance Program (ESMAP) is a global knowledge and technical assistance program administered by the World Bank. It provides analytical and advisory services to low- and middle-income countries to increase their know-how and institutional capacity to achieve environmentally sustainable energy solutions for poverty reduction and economic growth. ESMAP is funded by Australia, Austria, Denmark, Finland, France, Germany, Iceland, Japan, Lithuania, the Netherlands, Norway, Sweden, and the United Kingdom, as well as the World Bank.

making and greater accountability. In addition, regular progress reviews have been introduced at different levels using standard reporting formats. Saraswat noted a number of other positive changes when she recently met with MSETCL staff and management.

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The success of the Strategic Alliance model has allowed other power sector state utilities in India to appreciate the usefulness of capacity building as a means to bring about organizational transformation.

“The current Country Partnership Strategy between the World Bank and India gives us the mandate to work in low-income states, where the MSETCL capacity building experience will prove to be immensely useful,” said Saraswat.

“When we have discussions with our counterparts in low-income states and they express doubts about what will or won’t work, we are able to tell them ‘We did this in Maharashtra.’ ”

