USAID ENERGY POLICY PROGRAM

SUCCESS STORY

POWER-SIM AIDS PAKISTAN'S POWER SECTOR

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SUCCESS STORY

PowerSIM Aids Pakistan's Power Sector

Trainees from Ministry of Water and Power after successful completion of the PowerSIM Training

PowerSIM Model Presentation at Planning Commission

Shabana Kifayat, an accountant at the Ministry of Power & Natural Resources (MNPR) says, "MNPR can use PowerSIM to determine the average gas cost. More importantly, it may determine how much sale prices of different sectors are to be increased and decreased to cover the average gas price/cost".

There is a grave energy supply and delivery problem in Pakistan. Expensive natural gas has been declining as a fuel in power generation and imports have slowed. The impact on the power sector of natural gas availability is substantial but to date there has been no way to easily measure the financial impact.

The USAID Energy Policy Program (EPP) team developed a tool that would attend to these critical needs – the Power Sector Integrated Model, known as PowerSIM, which is a Microsoft Excel-based policy analysis tool. The main purpose of PowerSIM is to help the Government of Pakistan in evaluating policy options and measures aimed at improving the financial efficiency and sustainability of the country's power sector. It is also being used to address a major problem regarding LNG, for instance, what happens if you allocate LNG to the power sector at different amounts and quantity? The Ministry of Water and Power has used it to demonstrate what happens to the power sector with additional gas supply as the tool allows policy makers to see how small changes impact the overall system such as consumer prices, circular debt, the cost of generation, and fuel use. Currently, EPP is using PowerSIM to develop the Planning Commission's 11th 5-Year Plan to build financial and supply assumptions.

While developing PowerSIM, EPP carried out training sessions for senior officials and technical staff at the Ministry of Petroleum and Natural Resources and Ministry of Water and Power. A total of 11 participants, including one female official, attended the session. "Currently, I am dealing with the affairs of finance at the Power Ministry. Through the PowerSIM, I can analyze data, information and statistics provided by NEPRA and other departments", opines Muhammad Farhan, a Section Officer at the MWP.

PowerSIM is now being used by the Government of Pakistan to forecast the financial impact of improved performance within existing systems such as greater efficiency, power generation and infrastructure additions, fuel substitutions, improved cost recovery, and policy changes. It has facilitated the Ministry of Water and Power and Ministry of Petroleum and Natural Resources to better analyze both energy and cash flow and subsequently make informed decisions. It has further helped assess the impact of policy changes from uniform national tariffs to differential tariffs and the impact of timely fuel payments to Independent Power Producers.