## **Training the trainers in TPM**

competitive advantage in manufacturing increasingly demands high quality, low cost, and precise delivery schedules. Machinery breakdowns, material shortages, defective products, unsafe conditions, and labor shortages remain obstacles to achieving these three goals. Overcoming these obstacles without adversely affecting other factors determines the fate of an enterprise. Total productive maintenance (TPM) is an approach that has been successful in reducing costs while improving quality and delivery reliability. TPM, originally developed by Toyota's supplier base, has become an essential prerequisite for world-class manufacturing. It focuses on improvement activities, production equipment, and the integration of maintenance with production.

The training course on TPM, held in Lahore, Pakistan, 14–18 April, was a collaboration between the APO and the National Productivity Organization, Pakistan. It was tailored to permit developing member countries to train managers, engineers, and NPO technical consultants; promote the TPM concept; and train others in its application. The three resource speakers deputed by the APO provided participants with both a theoretical and practical understanding of the tools and strategies to implement TPM, while a local speaker shared experiences of implementing TPM in companies in Pakistan with the 22 participants from 12 member countries.

Senior Management Consultant Masahisa Mizumoto, Central Japan Industries Association, introduced the background and overview of TPM, including linkages between TPM and lean production systems. He also explained TPM implementation strategies composed of eight pillars and 12 steps.

Technical issues in TPM implementation were covered by Director and Head T. Rajachidambaram, Dr. Ambedkar Institute of Productivity, NPC, India. He described six strategies in the preventive maintenance and monitoring process. A sample case study on overall equipment effectiveness was also given to participants to test their understanding.



Participants discussing how to apply TPM

A discussion on TPM implementation procedures was initiated by Senior Manager Kabir Ahmad Mohd. Jamil, Malaysia Productivity Corporation. He argued that the success of TPM implementation relies not on machine operators alone but depends upon the involvement of everyone in the organization. All must understand the objectives, operational details, and requirements of TPM.

A site visit to Honda Altas Pakistan, an automotive assembly factory, provided an opportunity to observe 6S, quality control, and visual management practices. Since the company was in the process of implementing TPM, a tour of the production line provided insight into the initial stage of TPM practice. The training course concluded with participants presenting action plans for applying TPM within their own organizations. As follow-up and monitoring activities, participants were requested to submit individual progress report to the APO within six months.