Japanese Kaizen Methods: Improving Quality, Improving Productivity

 A Kaizen Promotion Project to Support the Manufacturing Sector in Ethiopia



Dr. Kikuchi (right) visiting a company where he provided Kaizen training. (Photo: Tsuyoshi Kikuchi)

"Kaizen" is a term used to describe the initiatives that were mainly developed on the factory floor and spread through the manufacturing sector in Japan during the period of high economic growth after World War II. Many ways of thinking and methods aimed at improving quality and productivity were created, such as the "55"¹ methodology based on the five "S" terms of Sort, Straighten, Shine, Standardize, and Sustain. Over the years, Japanese-style "Kaizen" also became famous overseas.

Kaizen is an approach in which every one of the people working at a production site considers measures to improve quality and productivity by doing whatever they can to reduce waste in the production process and implement such measures in their jobs. Tools and raw materials used at the workplace are put in good order, and wasteful processes and methods are reconsidered. This is done by everyone throughout the workplace. Through this process, workers are able to improve quality and productivity, cut costs, shorten lead time, and create better work environments while using existing facilities and machines as they are, without the need for new capital investments. Kaizen uses initiatives that are easy to understand for anyone with basic scholastic ability. Kaizen can be applied across borders and ethnicities, not only for the manufacturing sector, but also for other sectors such as service industries and public services.

One of the persons who took a strong interest in the Kaizen approach was the former Prime Minister of Ethiopia in Eastern Africa, the late Meles Zenawi. Ethiopia aims to be a middle income country by 2025. While pursuing this goal, the country has achieved high GDP growth in recent years, except for the manufacturing sector, which continues to stagnate. The government has focused on enhancing the competitiveness of the manufacturing sector, and has positioned this as a national priority in the next national development plan. While working to tackle this issue, former Prime Minister Meles grew interested in the concept of Kaizen, which had supported the growth of Japanese manufacturing sector. He asked for cooperation from the Japanese government, and "The Project on Capacity Building for Dissemination of Quality and Productivity Improvement (KAIZEN)" was started in November 2011. Chief adviser to this project is Dr. Tsuyoshi Kikuchi of Japan Development Service Co., Ltd., an expert who has previously been involved in the dissemination of Kaizen in developing countries, in countries such as Tunisia and Argentina.

Dr. Kikuchi explained, "Kaizen is referred to as a participatory or bottom-up approach, because employees take the initiative for improvement activities. I think that Mr. Meles found this kind



Factory workers learning about Kaizen activities under the instruction of a Japanese expert. (Photo: Tsuyoshi Kikuchi)

of approach more fitting to the national character of Ethiopia and therefore felt it would be more effective than topdown approaches commonly used in Western countries. Kaizen initiatives are often carried out in small groups, and Ethiopia has a deep-

rooted culture of collaboration in small groups that has been fostered through agricultural work. Mr. Meles must have thought that the two were compatible."

This project ended in November 2014. Its aim was to enhance the competitiveness of the industrial sector by transferring Kaizen techniques and experience from Japan to Ethiopia. The first challenge for the project was to foster staff members of the local counterpart organization, EKI². Training courses were offered to 57 staff members, including a course to teach Kaizen theory, practical training in large- and medium-sized companies trying out Kaizen activities and techniques they had learned in real workplace environments, and training sessions conducted in Japan. On top of these, the project also trained instructors to teach Kaizen approaches to vocational school teachers, and transferred Kaizen techniques to small companies.

"In the beginning, it was difficult to tackle issues such as how to communicate the Japanese Kaizen way of thinking, given differences in values. However, as we built trusting relationships, the Ethiopians began to appreciate the performance of the Japanese experts. They became more willing to learn and absorb as much knowledge from us as possible. During the project period, we taught Kaizen methods to as many as 51 large- and medium-sized companies and 306 small companies. Most of them are satisfied with the results of Kaizen initiatives - their employees have become more willing to participate in Kaizen activities, and guality and productivity improved through the shortening of work and lead time and a reduction in defective products. Of course, things changed at production centers, but I myself was surprised at how the mindsets of management and employees in particular changed, even though instructions took place over only five months at largeand medium-sized companies, and two months at small companies. This project was also covered extensively in the media. These days, even members of the general public, people like taxi drivers and hotel staff, are talking about "Kaizen."

Given this success, at the strong request of the Ethiopian government, plans are now underway to initiate another project spanning five years. Kaizen has been gaining popularity in the country, and momentum is now so strong that it will likely grow into a national movement. Expectations are mounting for Ethiopia to act as a center of Kaizen dissemination to nearby African countries. Dr. Kikuchi commented, "If Kaizen techniques and ways of thinking can permeate not only Ethiopia, but also other African countries, it will help to create a foundation for Japanese companies to expand into Africa further down the line." The concepts of Kaizen – the methodology that made it possible for the Japanese manufacturing industry to efficiently produce high quality products – are now starting to catch on and grow in the African continent.

- *1 The "55" are as follows:
- Sort: Sort out and separate that which is needed and not needed in the area.
- Straighten: Arrange items that are needed so that they are ready and easy to use, clearly identify locations for all items so that anyone can find them and return them once the task is completed. Shine: Clean the workplace and equipment on a regular basis in order to

maintain standards and identify defects. Standardize: Revisit the first three of the 5S on a frequent basis and confirm the condition of the workplace using standard procedures. Sustain: Keep to the rules to maintain the standard and continue to improve every day.

*2 Ethiopian KAIZEN Institute