**Let Japanese Development towards Modernization Be a Lesson**

"*Human beings are born equal. But the decision to learn or not to learn will make the difference*"  
Yukichi Fukuzawa

Historical evidence shows that technological characteristics critically depend on the particular set of inputs and their costs within which the technology emerges. One hundred fifty years ago Japan began to intensively study other nation’s development and adopted new technologies and institutions from them and successfully industrialized and modernized in a short time. In the case of the first railroad construction, for instance, Japan did not simply adopt rail technology. To cope with its underdeveloped steel production capacity, Japan substituted the liberal use of steels for the sleepers & bridges with the local wood material. Employing adaptation approaches that harmonized foreign technologies and Japan’s own resources, i.e., physical and human resources, the Japanese continued to learn one new technology after another in a relentless drive towards modernization. In those days, a lot of foreign engineers were invited and hired, and many Japanese went abroad to study advanced technologies and institutions, primarily under Japanese government programmes.

Western knowledge and technology poured into Japan from overseas. But they were not simply borrowed, instead, adapted to fit the Japanese society and spirit, i.e., two different sets of knowledge: foreign & Japanese were skillfully synthesized to create new knowledge and technology. This “Japanese spirit, Western knowledge” = wa-ken yosai - could be a model for blending local and external knowledge- “Beware of throwing out the good elements of your country with the bad: the local knowledge is basic tool to solve local problems.”

Immediately after the world war II, virtually, Japan had no resources and no capital but good people and good management attitudes. Quality control introduced from U.S. was developed, in Japan’s employee-oriented culture, into a method of quality improvement which is implemented through self-directed quality circles with wide workers participation. Workers exchange their successes, mistakes and failures to each other and build shared knowledge.

We, Ethiopians, would be wise enough to learn and act how to facilitate the adoption and adaptation of knowledge and technologies and develop solutions specific to our own needs, as opposed to simply copying approaches used by developed countries so as to bring the swift renaissance of Ethiopia.

Assefa Yimer and Tola Beyene,  
Ethiopian Kaizen Unit
Kaizen and other tools which helped quality and productivity improvement in Japan spread all over the world. Although Kaizen is at an infant stage in Ethiopia, efforts to implement it in the selected Kaizen pilot companies started in December 2009.

Ethiopian Kaizen Unit members and participants from those pilot companies of different industry sectors visited Japan from May 8-23, 2010, to study the actual implementation of Kaizen efforts in its birth place. The overall objective of the visit to Japan was to learn and fully understand Kaizen knowledge from accumulated experiences. During the visit, the participants were divided into two groups and took the training in different places. The first group of twenty, ten each, from Kaizen Unit and from the pilot companies went to Osaka and observed 13 companies from different sectors, thereby acquired significant understanding of how these companies are implementing Kaizen. The participants in Osaka were also able to visit Museum of Panasonic Matsushita Electric House and Kyoto City which is known for its tourist sites. The second group of twenty people from the pilot companies went to Nagoya. Their visits included Toyota Automobile Factory which is exemplary in Kaizen.

The participants have learned a lot from the visits which put them in a better position in terms of how to implement Kaizen in the companies in Ethiopia. They were able to grasp the Japanese approaches to the work place management, team work, Kaizen techniques and were really able to recognize how Japanese companies achieve their objectives and the motives by which employees accomplish tasks entrusted to them.

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Some facts learned from the Japanese Companies the study groups visited:

- Japanese companies have clear business policies which they help sustain competitiveness in the world market.
- There is strong belief in creating clear and neat working environment conducive to defect-free products and services which enable to meet customers’ satisfactions.
- Strong commitment of management and employees to achieving continuous quality and productivity improvement.
- The Japanese people in business strongly believe that workers are crucial assets to the companies, so that they put high priority on keeping safety of employees in factories, e.g., working on the machines.
- Including the owners and managers of the companies every employee cleans his/her own office every morning for ten minutes before commencing work.
- In most companies members of Quality Control Circles (QCC) are expected to suggest new ideas once in a month that contribute to quality and productivity improvement.
- Impressive time management and work discipline.
- Though the companies in Japan are giants and some of them have established an internationally reputable status, still they are continuously implementing Kaizen with such activities as QCC, 5S and others for further improvement.
- Focus on Small and Medium Enterprises (SME) in Japan has been instrumental in the growth of various companies including some of the present day gigantic companies of Japan.
- Inspiring team work among the employees in the companies.

### Lessons Learnt from Existing Facts of Kaizen in the Japanese Companies Visited

Some of the Companies/Institutions visited in Japan and respective Kaizen Implementations:

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<th>Name of Company</th>
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<td>Hiroseka Hyper Tools, Inc.</td>
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<td>Turner Color Works LTD</td>
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### OSAKA Group

- Koto Engraving Nagoya Corporation: 5S and Visual Management
- Shikishima Baking Co., Ltd and Owari Textile Research Center: QC Story
- Toyota Commemorative Museum of Industry and Technology: The view of the Toyota Cost Reduction
- Toyota Motor Corporation: Basics TPM Concepts
- Toyota Industries Corporation: Kaizen Example, Policy Management

Fite Bekele, Metal Industry Development Institute
Kaizen activities in the First Phase Pilot Companies

Of the total 30 Kaizen pilot companies selected which are equally categorized into first and second phases, actual implementation of Kaizen in the fifteen first group companies started in December 2009. These manufacturing companies are from sectors of leather, chemical, metal, agro-processing and textile, and 2, 3, 5, 3 and 2 in number respectively. These companies are getting direct guidance and diagnosis by JICA study team consultants and Ethiopian Kaizen unit members. All the companies were visited by them 3 to 5 times. During these visits, problems of the companies were identified and discussed. A Kaizen core team of managers and QC Circles at each company was established to start their Kaizen process.

While JICA consultants were in Japan, the Ethiopian Kaizen team members have continued visiting the aforementioned companies so as to help their already started Kaizen activities. The team made an effort to make companies understand Kaizen basics through discussions, training and providing materials. The materials included: Kaizen study materials to the core Kaizen teams. Amharic translated 5S materials for front line operators for whom training was also given. The subjects of the team’s visits to the companies were: how to establish Quality Control Circles (QCCs); introduction of Kaizen boards at workplace “gemba”; and discussion on how to start 5S activities which is one of the Kaizen tools and foundation for Kaizen improvements.

Some companies have already formed QC Circles and achieved notable results by implementing certain creative actions such as fixing a conveyor to automate the transportation process of products; preparing formats used for recording workshop data; improving and setting work procedures and standards; making spare parts of machines using simple and cheaper materials; preparing Kaizen notice board; adapting the 5S activities to their companies working procedures, preparing training manuals and providing trainings (by their own Kaizen core team members); rearranging companies’ equipment and tools by applying 5S methods; and solving some routine small problems encountered on day-to-day company operations. Through these visits, the team has learnt that the importance of creating at each company awareness about Kaizen concept of the sustainable continuous improvement activities with firm knowledge-based performances. It should help the companies meet the required competitiveness goal of our country’s manufacturing sectors in the world market, and help them meet their social responsibility in operating their business.

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Japan Training Follow-up at Home

After returning back home, those two groups trained in Japan-Nagoya and Osaka got together for experience sharing on what they learnt at Metal Industry Development Institute (MIDI) conference hall on June 3, 2010.

Of the 40 training partakers, almost all the trainees in Japan, General Managers of some companies, Kaizen unit members and invited guests from JICA participated in the session. The session was chaired by Ato Getahun Tadesse, Head of MIDI and Ethiopian Kaizen Unit team leader and the two groups, the Osaka group and the Nagoya group, presented their respective experiences in Japan and what they have learned from the training.

On the occasion a lot of suggestions and opinions were expressed by the participants and thorough discussions carried out. Eventually, the participants reached to an agreement to have similar meetings every two months at the same hall to discuss and keep updated about how the acquired knowledge from Japan is put in practice in each company and their achievements on Kaizen activity.

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