



# Achievements in the Quality and Productivity Improvement (KAIZEN) Project

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## Profile of the Project

- Project Title: The Study of Quality and Productivity Improvement (KAIZEN) in Ethiopia
- Project Duration: October 2009 to May 2011
- Project Holder: JICA & Ministry of Industry
- Study area: Addis Ababa and its surroundings
- Sector Focused: Manufacturing
- Objectives
  - 1) Pilot Project Performance: To formulate a manual to be used for conducting KAIZEN activities in Ethiopia, which is prepared based on results from verification study through the implementation of pilot activities for selected 30 (thirty) companies;
  - 2) Human Resources Development: To transfer relevant skills and techniques to the staff members of KAIZEN Unit of Mol; and,
  - 3) National Plan Formulation: To make a plan to disseminate KAIZEN activities for manufacturing companies in Ethiopia.



## Sample Improvement Results (I)

### Qualitative Results:

- Clean working environment created,
- Team work and motivation of workers developed,
- Health and occupational safety of workers improved,
- Lower level workers accustomed to suggesting improvement ideas to management decisions – Increased Employee Participation,
- Knowledge obtained on how to meet quick delivery and to reduce costs.

## Sample Improvement Results (2)

### Quantitative Results

✓ Monetary impact from the improvements reported is ETB 500,000/company. The reporting ranges from ETB 10,000 to ETB 3.2 mill.

- By **Reducing costs** (a) ETB 10,000 per month and (b) ETB 78,000 per annum;
- By **generating additional income** of ETB 1.2 million per year;
- By **just decreasing down time** ETB 204,000 per day,
- By **rectifying raw materials defect** used for manufacturing ETB 2.4mill;
- By **identifying, repairing and reusing** of usable **machines & equipments** worth of ETB 3.25 mill.

✓ **Non-Monetary Measures of Improvement include:**

- Increasing labor productivity, by **reducing time loss for searching** tools on average 50%;
- Reduction of floor space around 50%;
- **Defect ratio improvement** in the range of 50-70%;
- **Lead time improved** in the range of 16 to 90%;
- **Labor saved** from 15 to 90%.



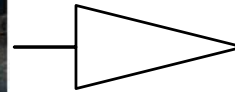
## Sample Improvement Results (3)

### Quantitative Results

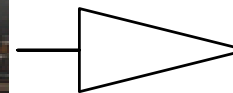
- Techtra Engineering  
Recovered additional revenue with an amount of 118,995 birr
- Maru Metal Industry  
Lead time reduced from 2weeks to 1week
- Ethio Japanese Synthtic Textile S.C.  
Reduced wastage of time by 624 min/month
- Matador Addis Tyre  
Reduced wasters of over production by 50%  
Motion and movement by 100%
- Universal Food Complex  
Decreased flour wastage by 190 qtl of wheat flour
- Addis Modjo Edible Oil Complex  
Produced additional 12,000 lit/day  
By eliminating 6hours dawn time/day
- Sebeta Agro-Industry  
By decreasing milk wastage recovered 846 birr/day

# Pictorial Presentation of some of the achievements obtained in the pilot companies

**Fig. 1** Sort, Set-in-order & Shine (**3S**) are implemented to standardize the inventory stock



**Fig. 2** In-process stock is repositioned to avoid **Muda of transportation**



**Before Kaizen**

**After Kaizen**

## Highlighted results of the Pilot Project (I)

Possibility*	high	good	some	low	no	total
Grade	5	4	3	2	1	
number of the companies	6	4	8	6	4	28

\* Possibility to be a “KAIZEN model company”

- 10 companies which are graded 5 and 4 are a candidate of the excellent companies.
- Exceeds one third of the companies has a possibility of the KAIZEN model companies.



## Highlighted results of the Pilot Project (2)

### **KAIZEN Model Company (Graded 5)**

means a company which continuously practices KAIZEN and as the result realizes achievements that significantly excel other companies in terms of quality /productivity improvement.

- Adama Spinning
- East Africa Group
- Kadisco Chemical
- Maru Metal Industry
- Universal Food Complex
- Zenith

### **Key Criteria for the Model Company**

- Model workplace activities: 5S, Standard operation sheets, Layout study
- General activities: Employee training of basic KAIZEN knowledge, Workload reduced
- Organization management: QCC activities, Wide dissemination of KAIZEN
- Management direction: Active top management, Good employee relations, Development of KAIZEN activities



## Assessment of Capacity Development of KU members

Level	Competence	Assignment	Before project	After project
0	no experience of KAIZEN		8	
I	Competent to conduct KAIZEN activities for yourself	Junior KAIZEN Consultant		
II	Competent to guide KAIZEN activities	Assistant KAIZEN Consultant		2
III	Competent to provide consultancy services on KAIZEN	KAIZEN Consultant		6
IV	Competent to provide consultancy services on KAIZEN	Senior KAIZEN Consultant		
V	Competent to provide consultancy services on KAIZEN	Lead KAIZEN Consultant		